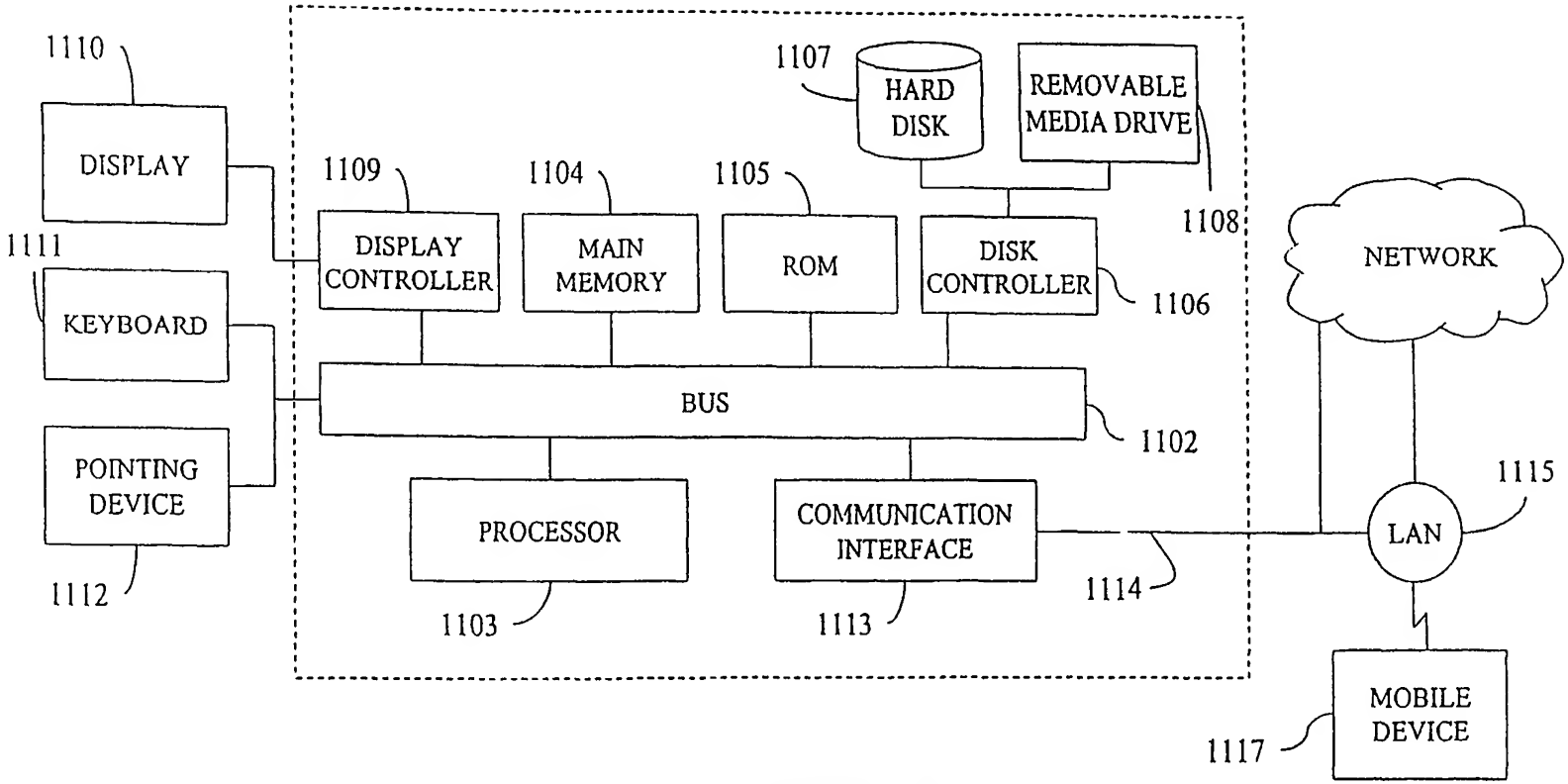

1110
DISPLAY
1111
KEYBOARD
POINTING DEVICE
1112
1109
DISPLAY CONTROLLER
1104
MAIN MEMORY
1105
ROM
1107
HARD DISK
REMOVABLE MEDIA DRIVE
1108
DISK CONTROLLER
1106
BUS
1102
PROCESSOR
1103
COMMUNICATION INTERFACE
1113
1114
NETWORK
1115
LAN
MOBILE DEVICE
1117

FIG. 1

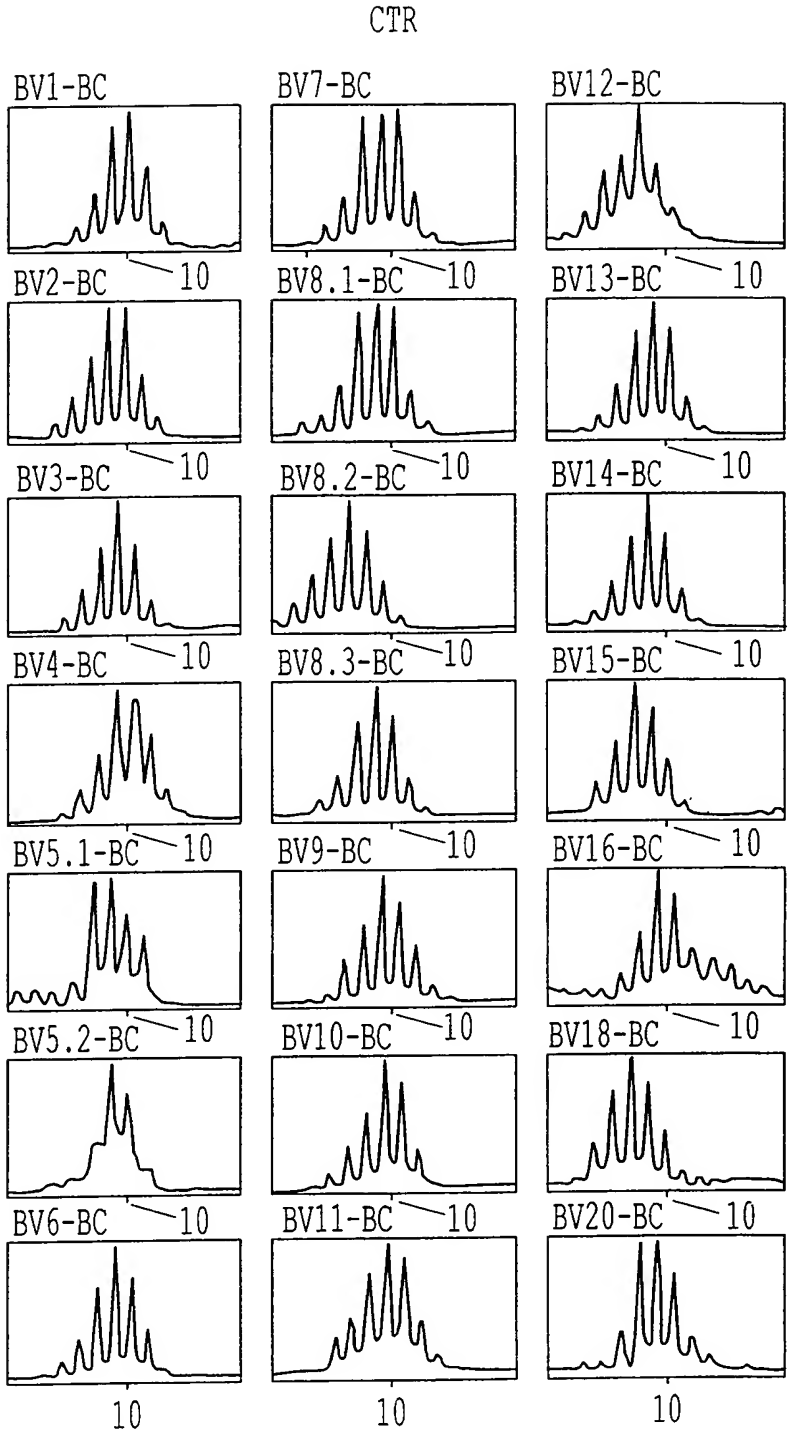

CTR
BV1-BC
BV7-BC
BV12-BC
BV2-BC
BV8.1-BC
BV13-BC
BV3-BC
BV8.2-BC
BV14-BC
BV4-BC
BV8.3-BC
BV15-BC
BV5.1-BC
BV9-BC
BV16-BC
BV5.2-BC
BV10-BC
BV18-BC
BV6-BC
BV11-BC
BV20-BC
10

FIG. 2A

CM-

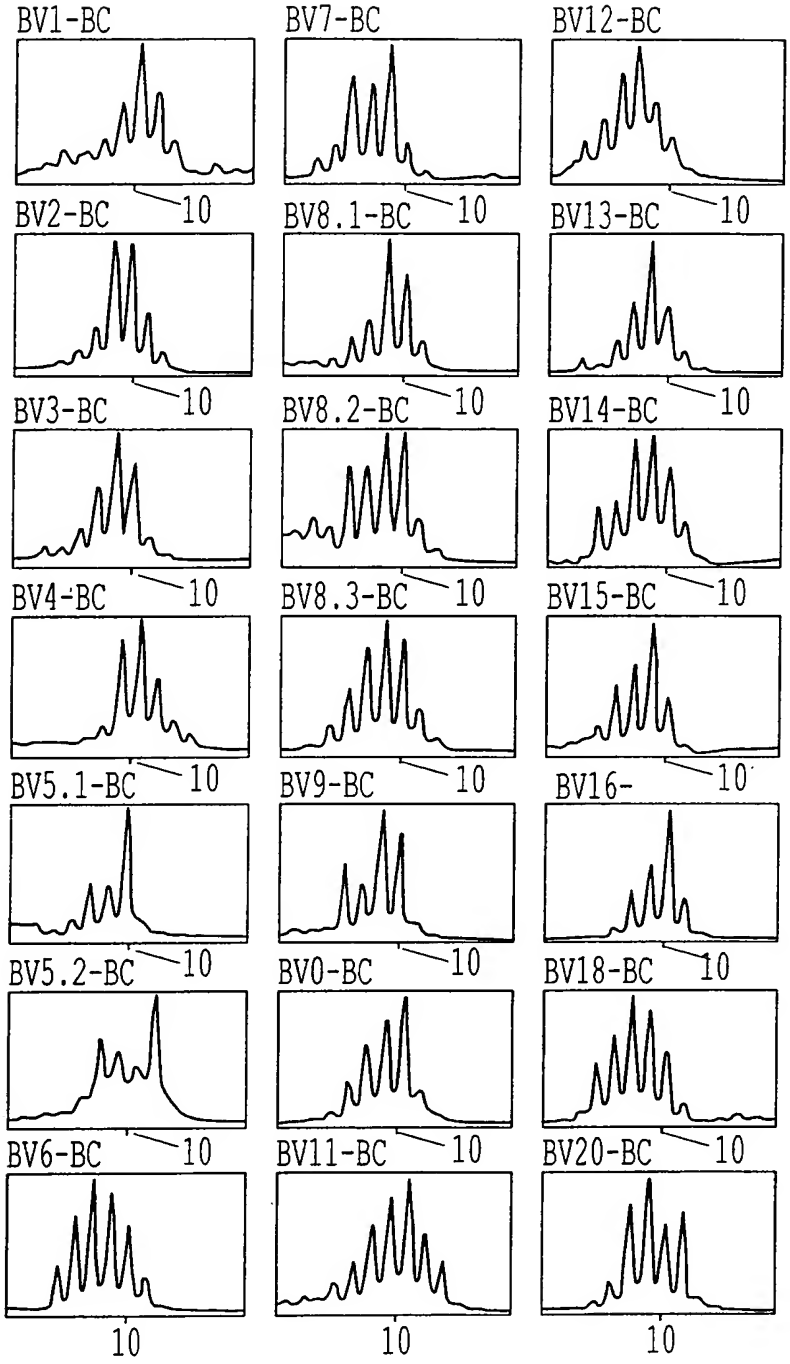

BV1-BC
BV7-BC
BV12-BC
BV2-BC
BV8.1-BC
BV13-BC
BV3-BC
BV8.2-BC
BV14-BC
BV4-BC
BV8.3-BC
BV15-BC
BV5.1-BC
BV9-BC
BV16-
BV5.2-BC
BV0-BC
BV18-BC
BV6-BC
BV11-BC
BV20-BC
10

FIG. 2B

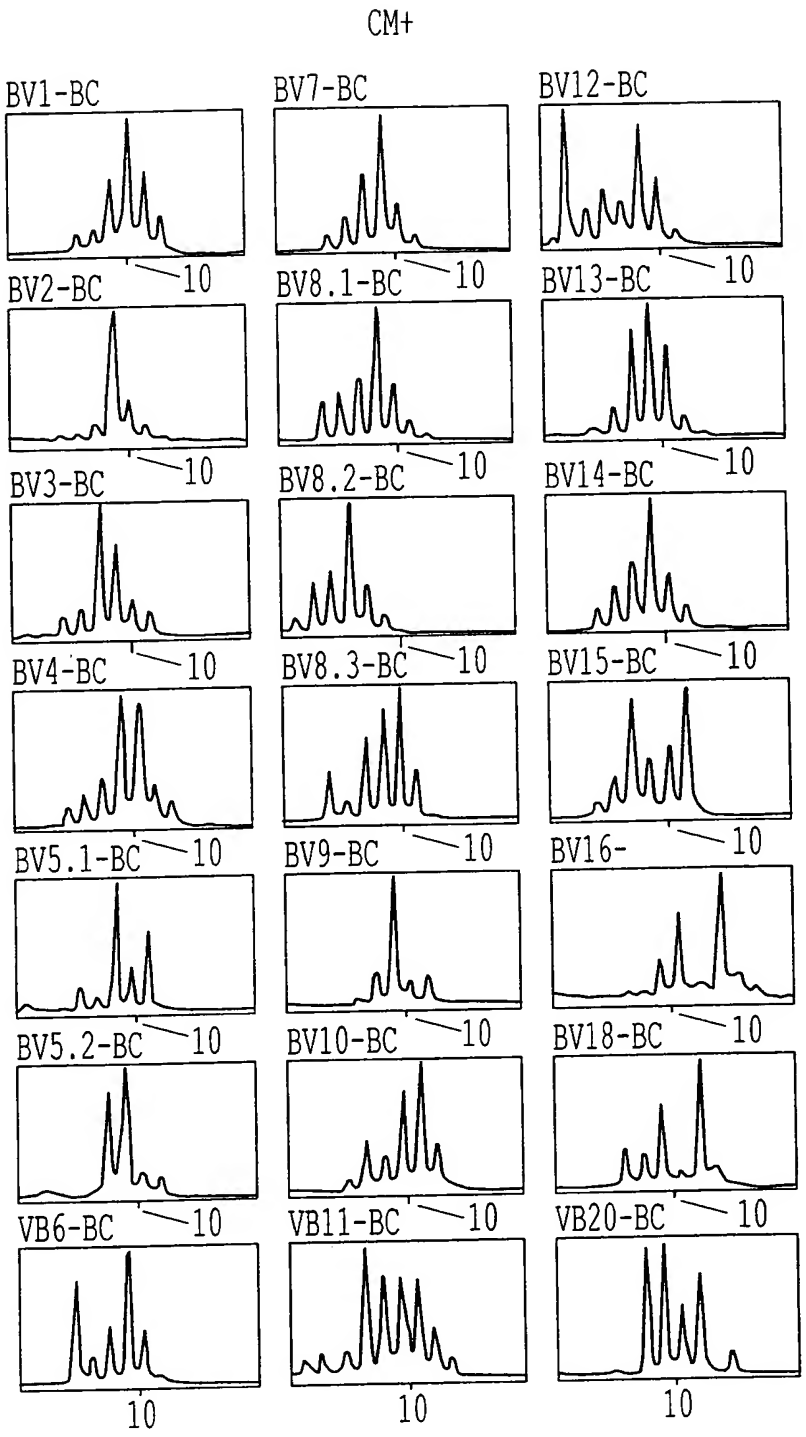

CM+
BV1-BC
BV7-BC
BV12-BC
10
BV2-BC
BV8.1-BC
BV13-BC
10
BV3-BC
BV8.2-BC
BV14-BC
10
BV4-BC
BV8.3-BC
BV15-BC
10
BV5.1-BC
BV9-BC
BV16-
10
BV5.2-BC
BV10-BC
BV18-BC
10
VB6-BC
VB11-BC
VB20-BC
10
10
10

FIG. 2C

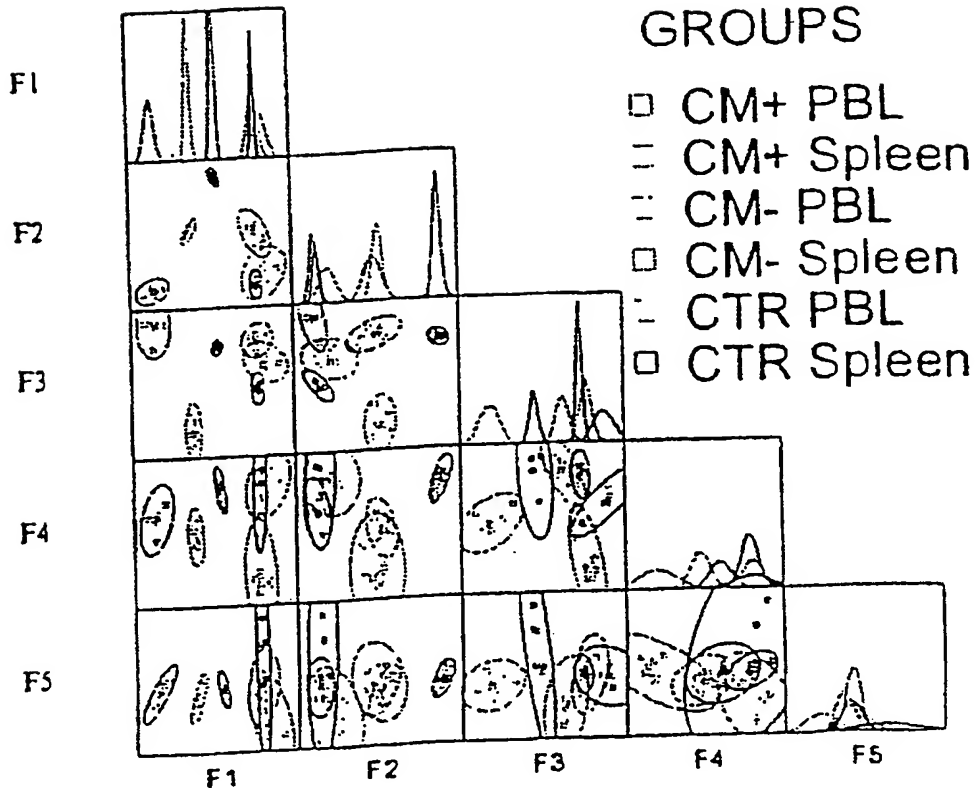

GROUPS
CM+ PBL
CM+ Spleen
CM- PBL
CM- Spleen
CTR PBL
CTR Spleen
F1
F2
F3
F4
F5
F1
F2
F3
F4
F5

FIG. 3

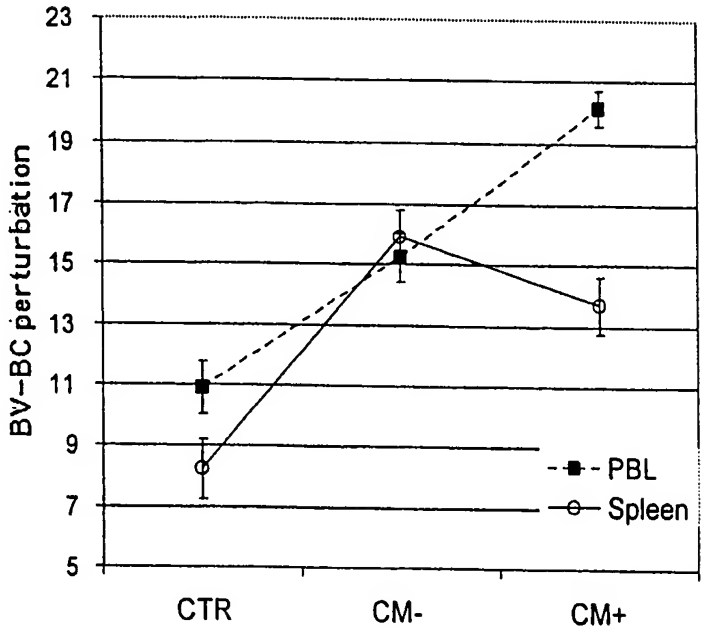


FIG. 4A

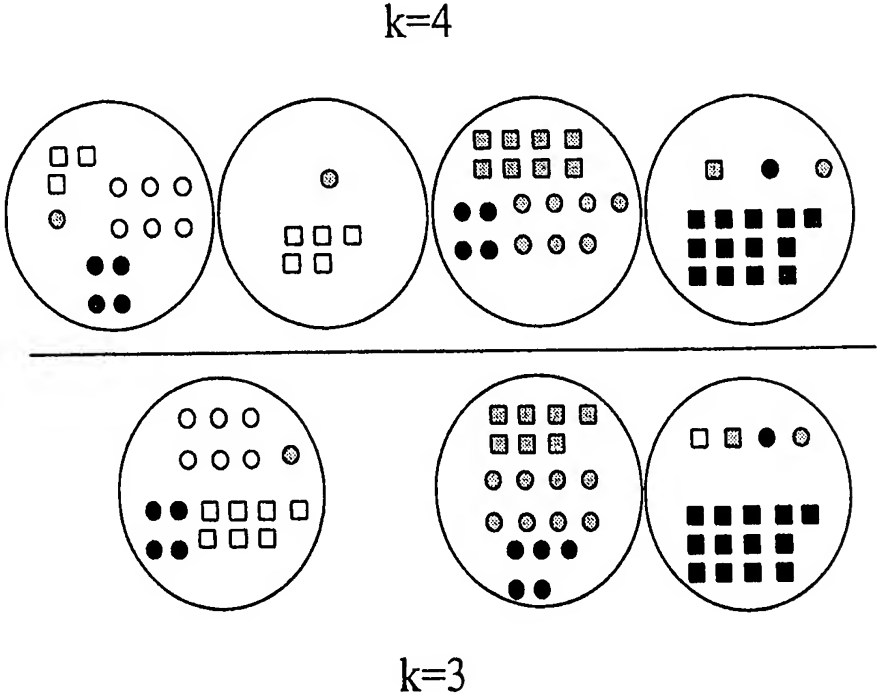


FIG. 4B

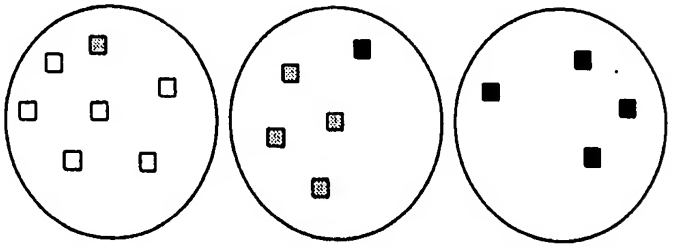


FIG. 4C

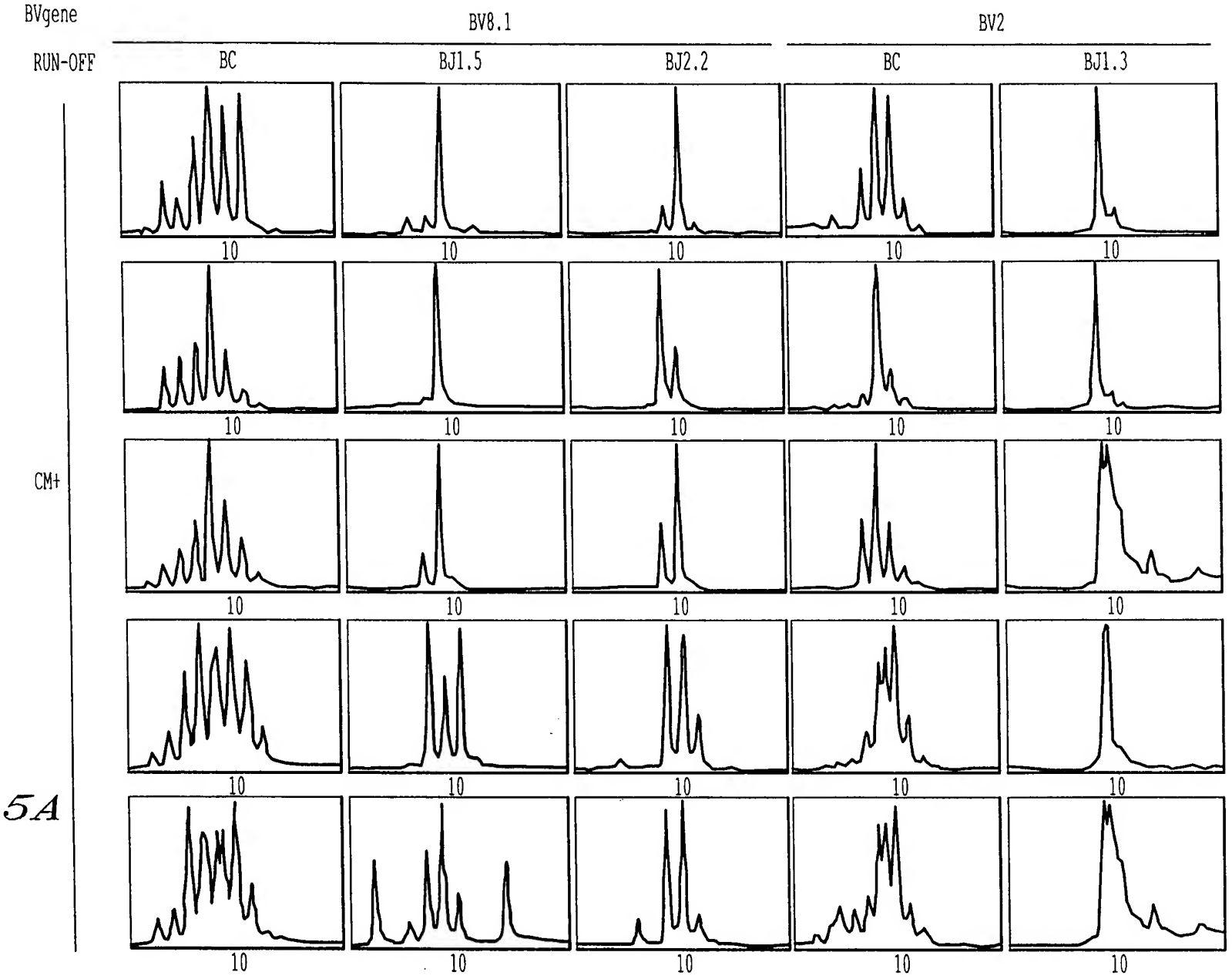


FIG. 5A

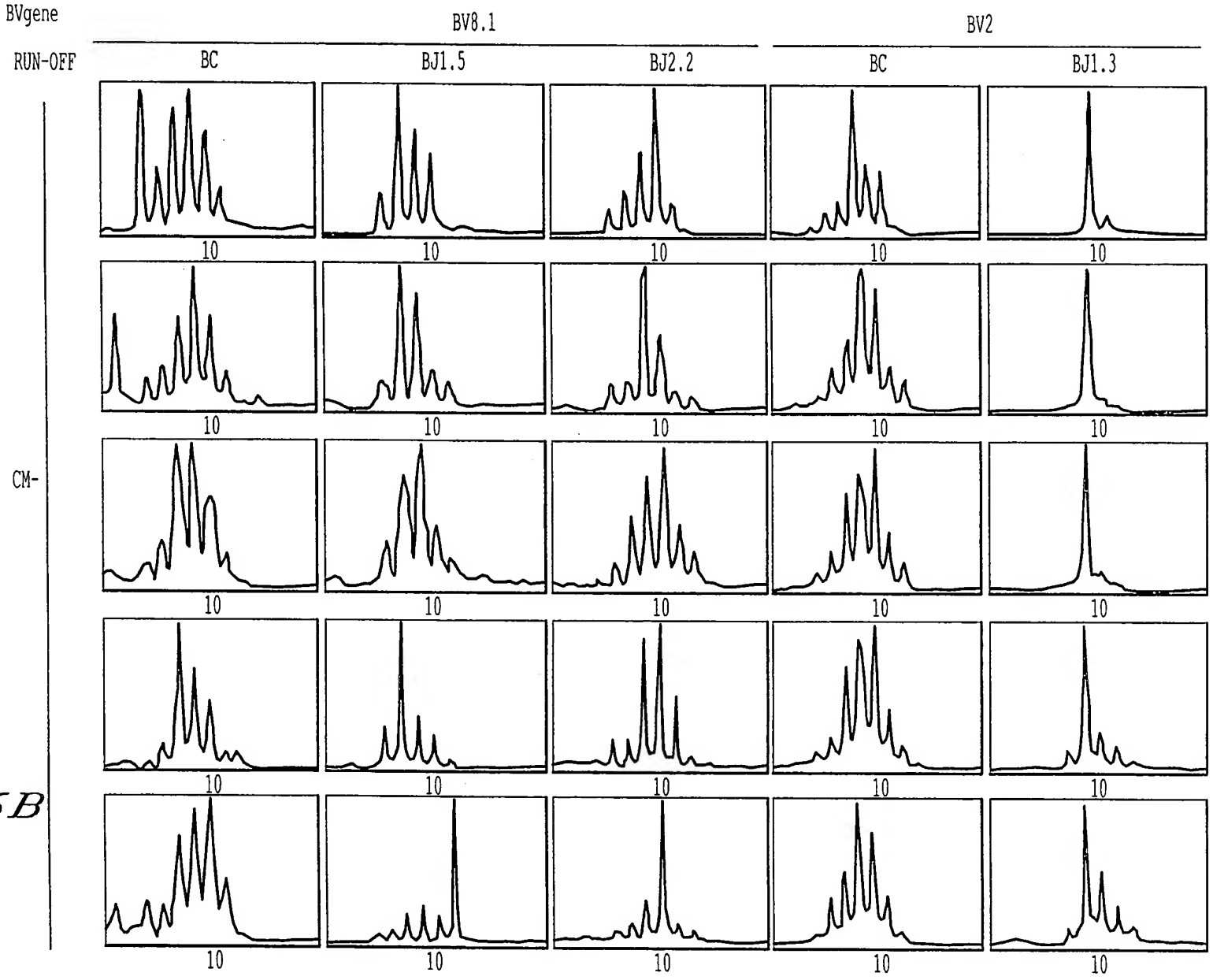


FIG. 5B

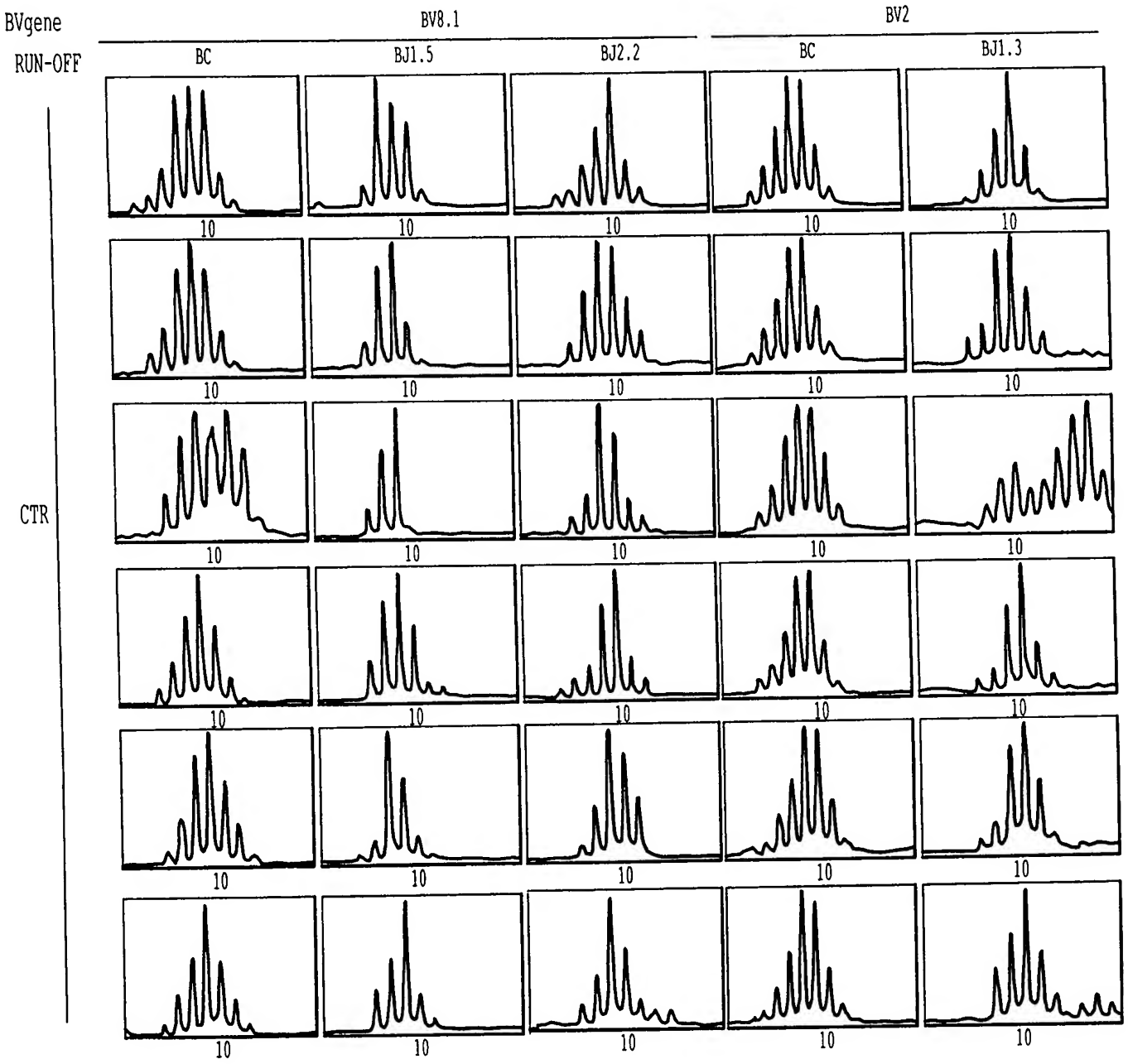


FIG. 5C

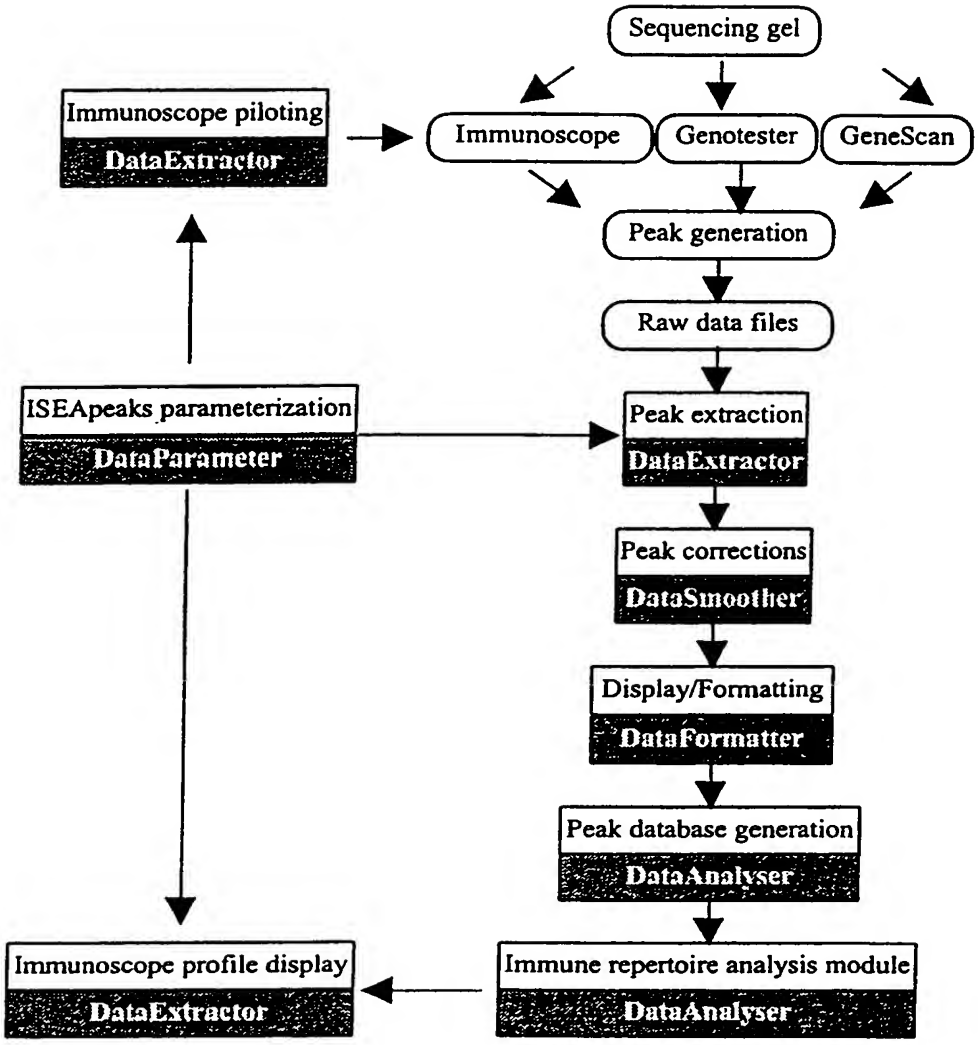

Sequencing gel
Immunoscope piloting
DataExtractor
Immunoscope
Genotester
GeneScan
Peak generation
Raw data files
ISEApeaks parameterization
DataParameter
Peak extraction
DataExtractor
Peak corrections
DataSmoother
Display/Formatting
DataFormatter
Peak database generation
DataAnalyser
Immunoscope profile display
DataExtractor
Immune repertoire analysis module
DataAnalyser

FIG. 6

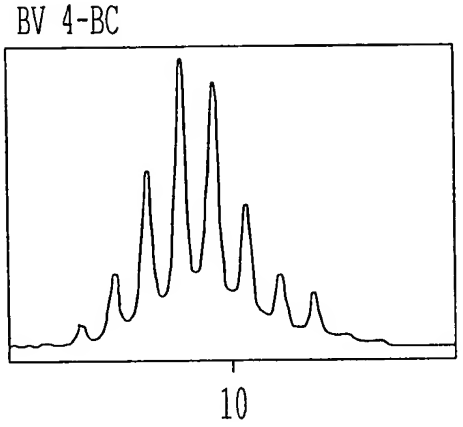


FIG. 7A

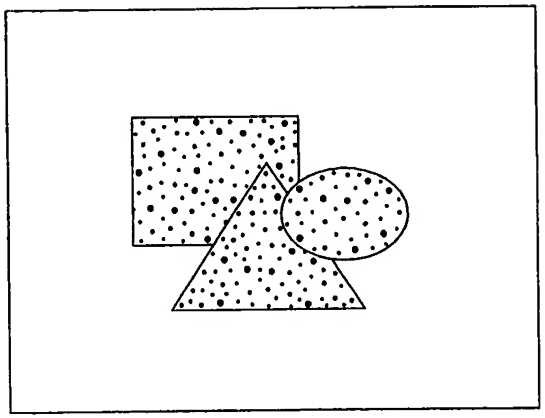


FIG. 7B

IMMUNOSCOPE RAW DATA	mLENGTH		178	182	184	187	190	192	193	196	198	199	201	202	202
	mAREA	100019	2008	6133	14418	23540	24664	751	13318	7082	789	4727	864	522	1203
	misCONSIDERED		1	1	1	1	1	1	1	1	1	1	1	1	1
FIRST FILTER	mLENGTH		178	182	184	187	190	192	193	196	198	199	201	202	
	mAREA	100019	2008	6133	14418	23540	24664	751	13318	7082	789	4727	864	1725	
	misCONSIDERED		1	1	1	1	1	1	1	1	1	1	1	1	
SECOND FILTER	mLENGTH		178	182	184	187	190	193	196	199	202				
	mAREA	100019	2008	6133	14418	23540	24664	14069	7082	5516	2589				
	misCONSIDERED		1	1	1	1	1	1	1	1	1				
THIRD FILTER	mLENGTH	0	178	181	183	186	189	192	195	198	201				
	mAREA	100019	2008	6133	14418	23540	14418	14069	7082	5516	2589				
	misCONSIDERED		1	1	1	1	1	1	1	1	1				

FIG. 7C

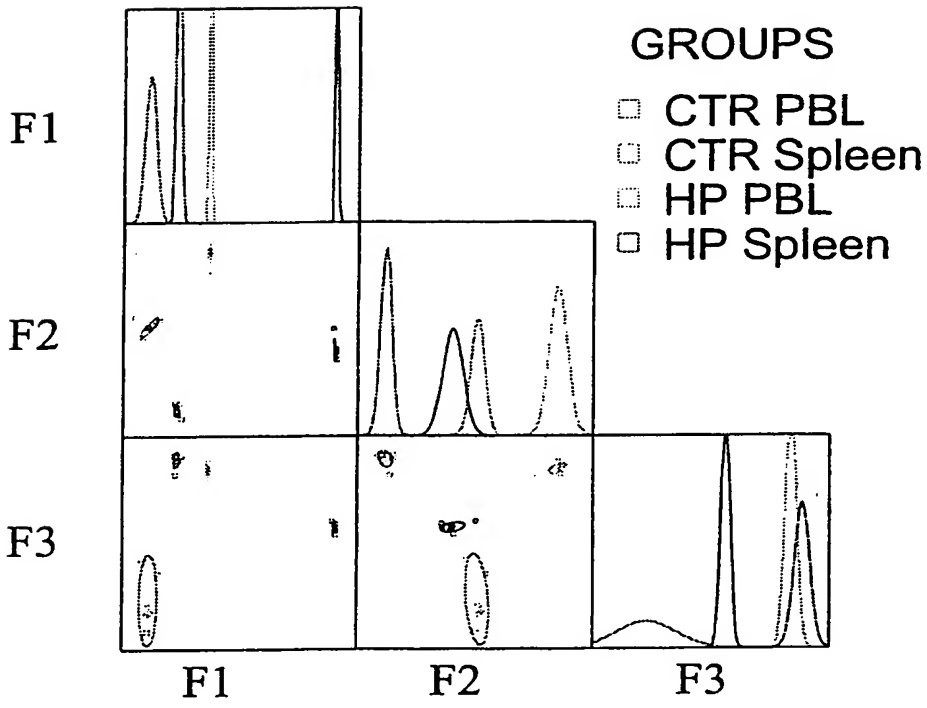


FIG. 8

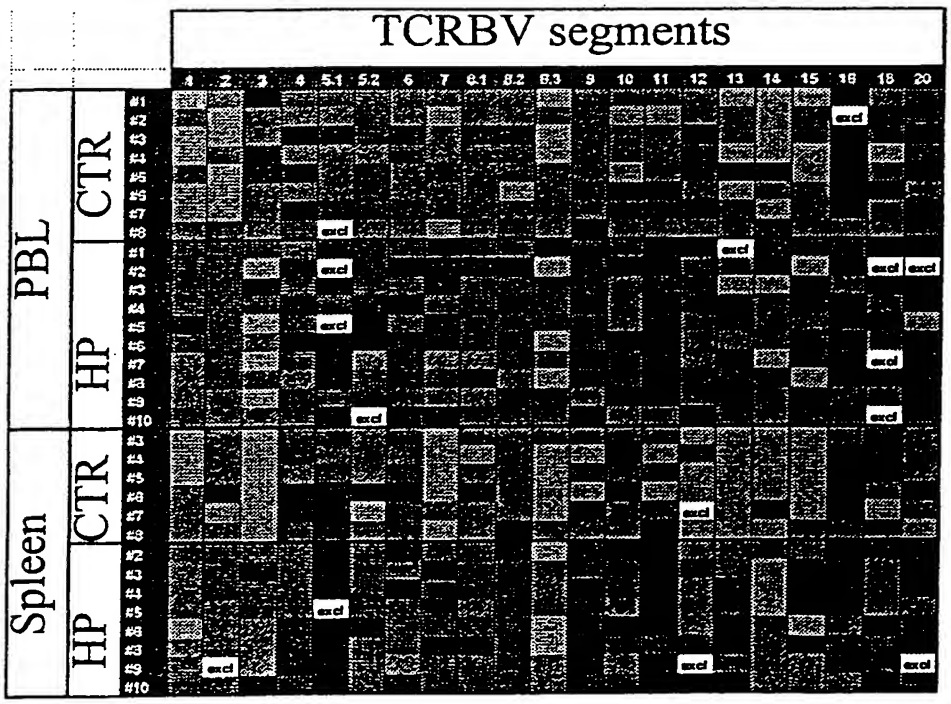
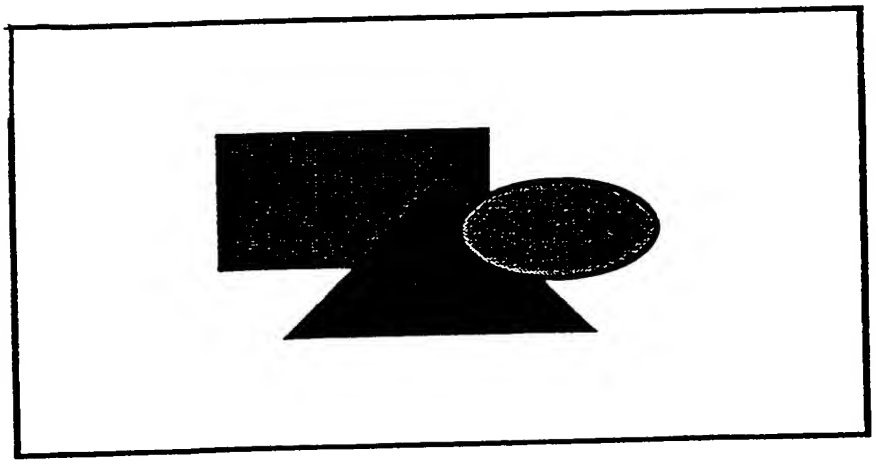
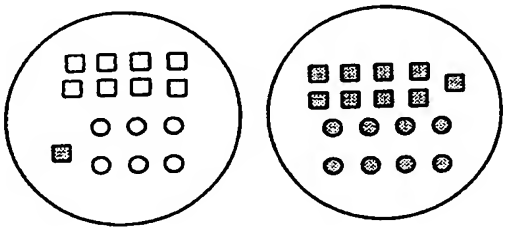

TCRBV segments
1 2 3 4 5.1 5.2 6 7 8.1 8.2 8.3 9 10 11 12 13 14 15 16 18 20
PBL
CTR
HP
Spleen
CTR
HP
excl

FIG. 9

FIG. 10A



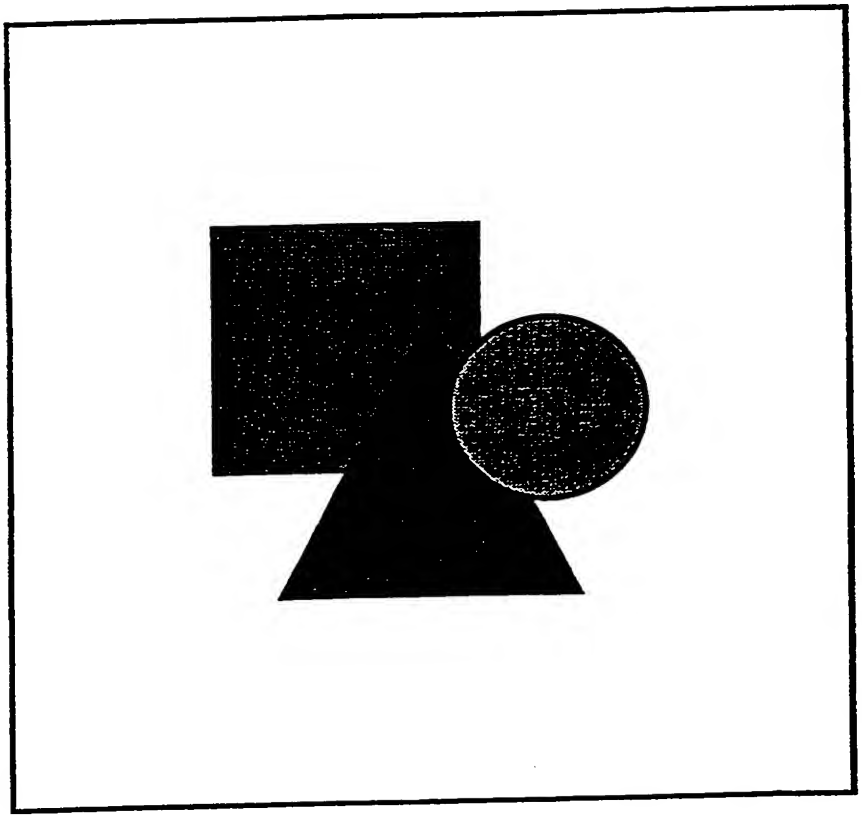


□ CTR PBL ▣ HP PBL

○ CTR Spleen ◎ HP Spleen

FIG 10B

FIG. 11A



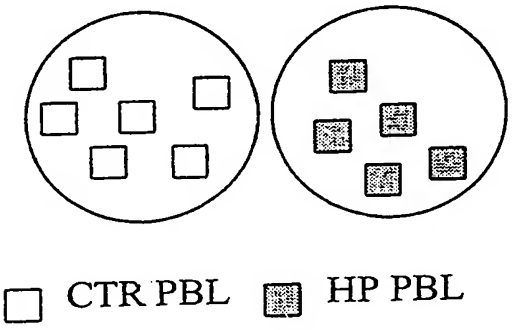


FIG 11B

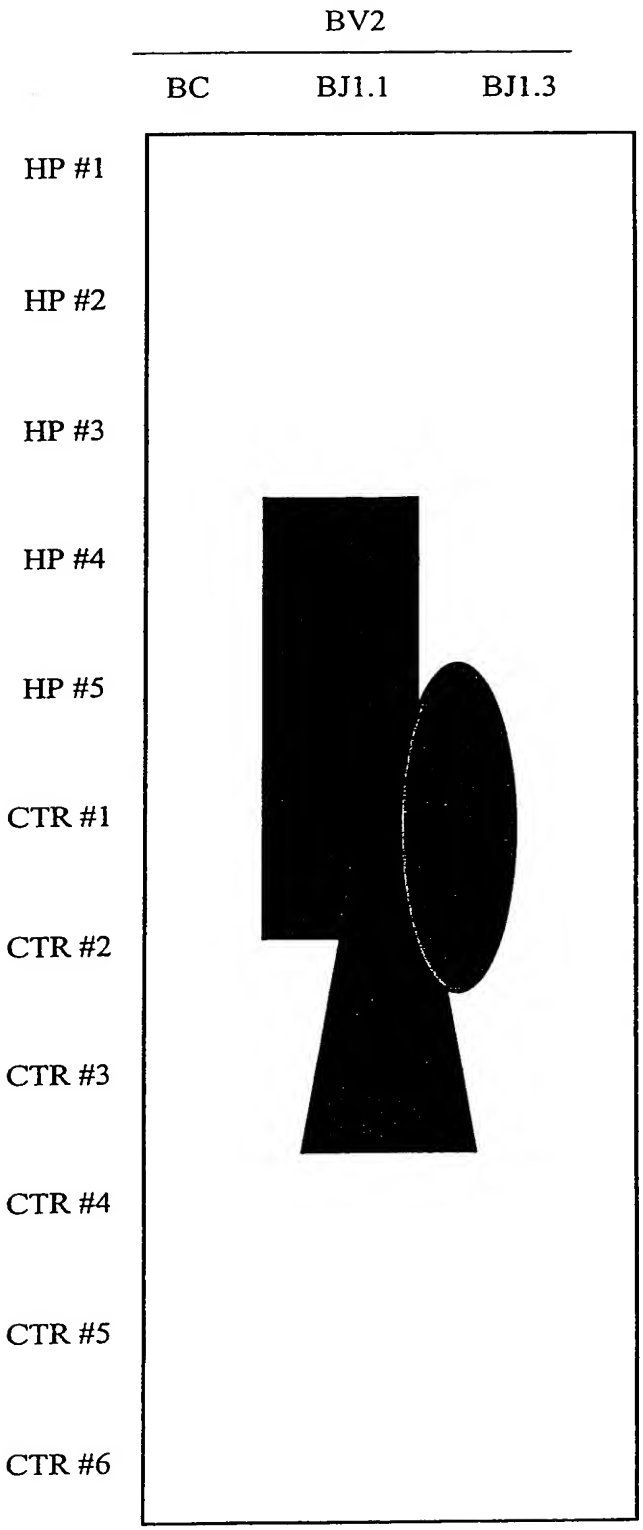

BV2
BC
BJ1.1
BJ1.3
HP #1
HP #2
HP #3
HP #4
HP #5
CTR #1
CTR #2
CTR #3
CTR #4
CTR #5
CTR #6

FIG. 12

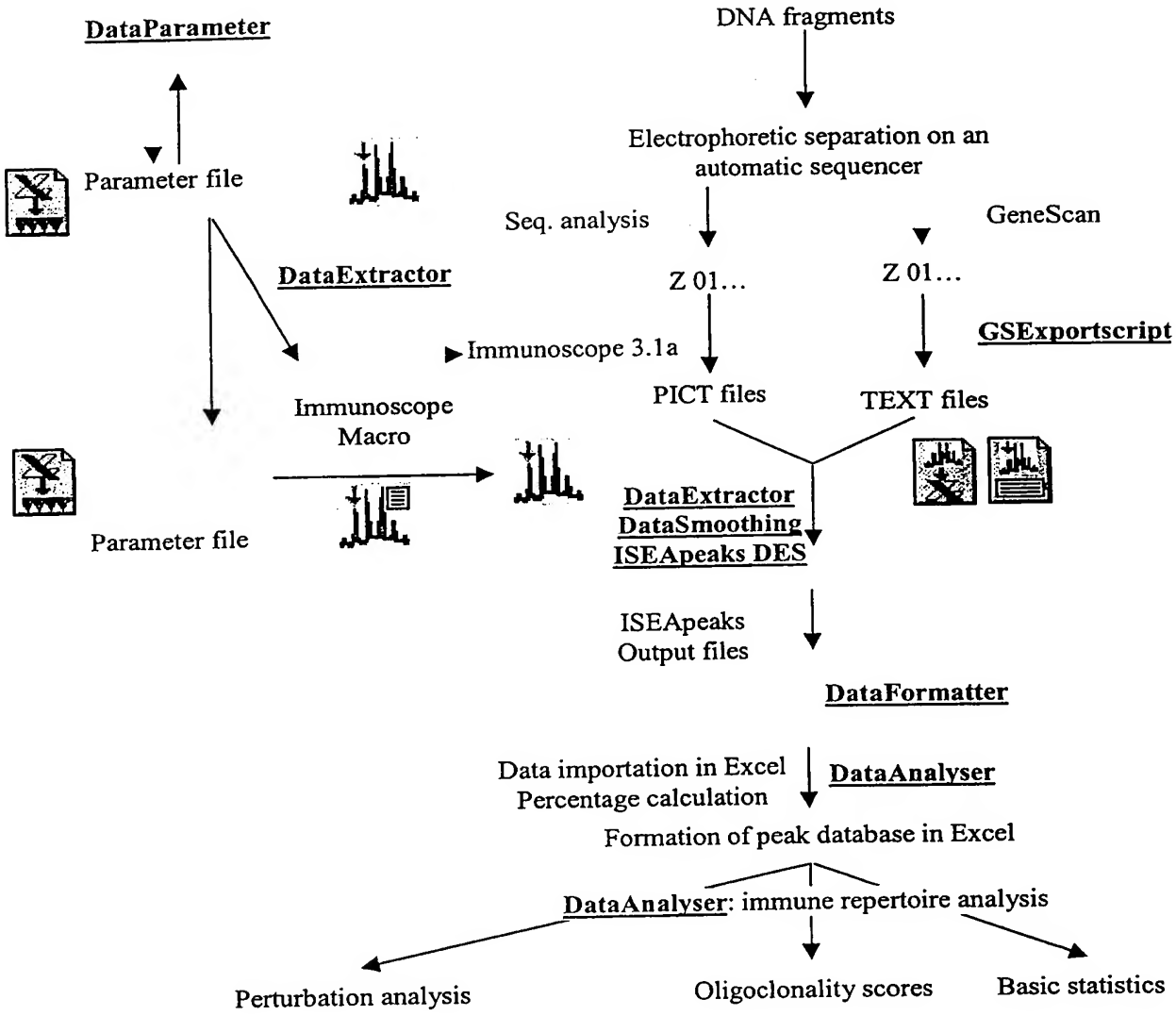
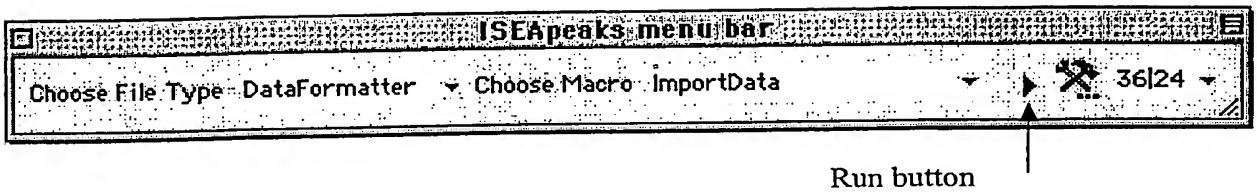

DataParameter
DNA fragments
Electrophoretic separation on an automatic sequencer
Parameter file
Seq. analysis
GeneScan
DataExtractor
Z 01...
Z 01...
Immunoscope 3.1a
GSExportscript
PICT files
TEXT files
Immunoscope Macro
Parameter file
DataExtractor
DataSmoothing
ISEApeaks DES
ISEApeaks Output files
DataFormatter
Data importation in Excel
Percentage calculation
DataAnalyser
Formation of peak database in Excel
DataAnalyser: immune repertoire analysis
Perturbation analysis
Oligoclonality scores
Basic statistics

FIG. 13

FIG. 14


ISEApeaks menu bar
Choose File Type DataFormatter
Choose Macro ImportData
36|24
Run button

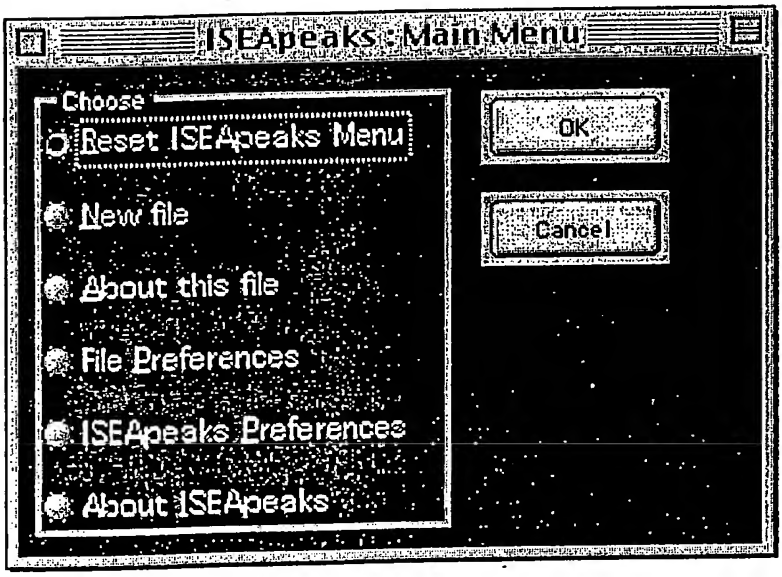

ISEApeaks : Main Menu
Choose
Reset ISEApeaks Menu
New file
About this file
File Preferences
ISEApeaks Preferences
About ISEApeaks
OK
Cancel

FIG. 15

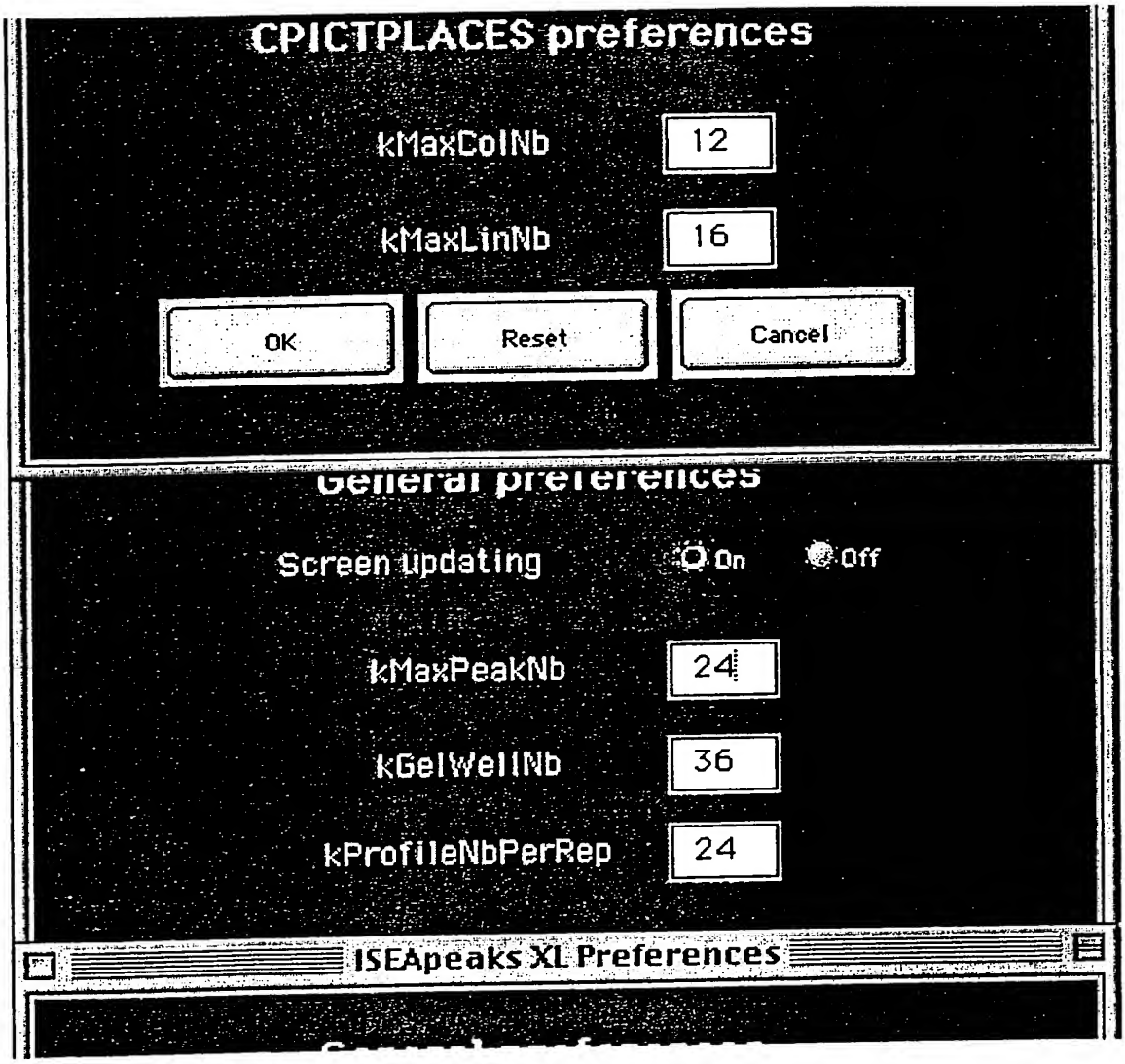
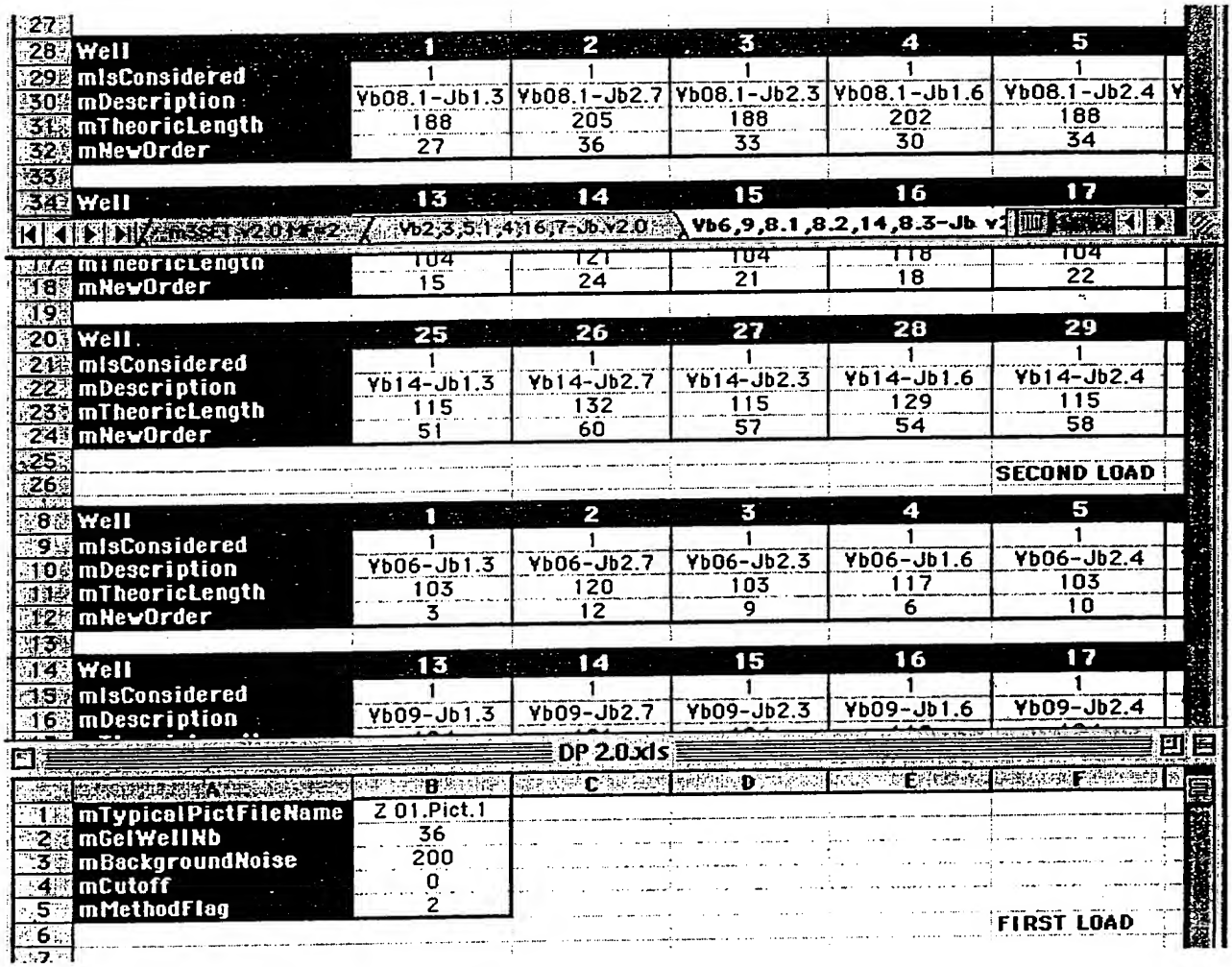

CPICTPLACES preferences
kMaxColNb
12
kMaxLinNb
16
OK
Reset
Cancel
General preferences
Screen updating
On
Off
kMaxPeakNb
24
kGelWellNb
36
kProfileNbPerRep
24
ISEApeaks XL Preferences

FIG. 16



Well	1	2	3	4	5
mIsConsidered	1	1	1	1	1
mDescription	Yb08.1-Jb1.3	Yb08.1-Jb2.7	Yb08.1-Jb2.3	Yb08.1-Jb1.6	Yb08.1-Jb2.4
mTheoricLength	188	205	188	202	188
mNewOrder	27	36	33	30	34

Well	13	14	15	16	17
mTheoricLength	104	121	104	118	104
mNewOrder	15	24	21	18	22

Well	25	26	27	28	29
mIsConsidered	1	1	1	1	1
mDescription	Yb14-Jb1.3	Yb14-Jb2.7	Yb14-Jb2.3	Yb14-Jb1.6	Yb14-Jb2.4
mTheoricLength	115	132	115	129	115
mNewOrder	51	60	57	54	58

SECOND LOAD

Well	1	2	3	4	5
mIsConsidered	1	1	1	1	1
mDescription	Yb06-Jb1.3	Yb06-Jb2.7	Yb06-Jb2.3	Yb06-Jb1.6	Yb06-Jb2.4
mTheoricLength	103	120	103	117	103
mNewOrder	3	12	9	6	10

Well	13	14	15	16	17
mIsConsidered	1	1	1	1	1
mDescription	Yb09-Jb1.3	Yb09-Jb2.7	Yb09-Jb2.3	Yb09-Jb1.6	Yb09-Jb2.4

DP 2.0.xls

	A	B	C	D	E	F
1	mTypicalPictFileName	Z 01.Pict.1				
2	mGelWellNb	36				
3	mBackgroundNoise	200				
4	mCutoff	0				
5	mMethodFlag	2				
6						FIRST LOAD

FIG. 17

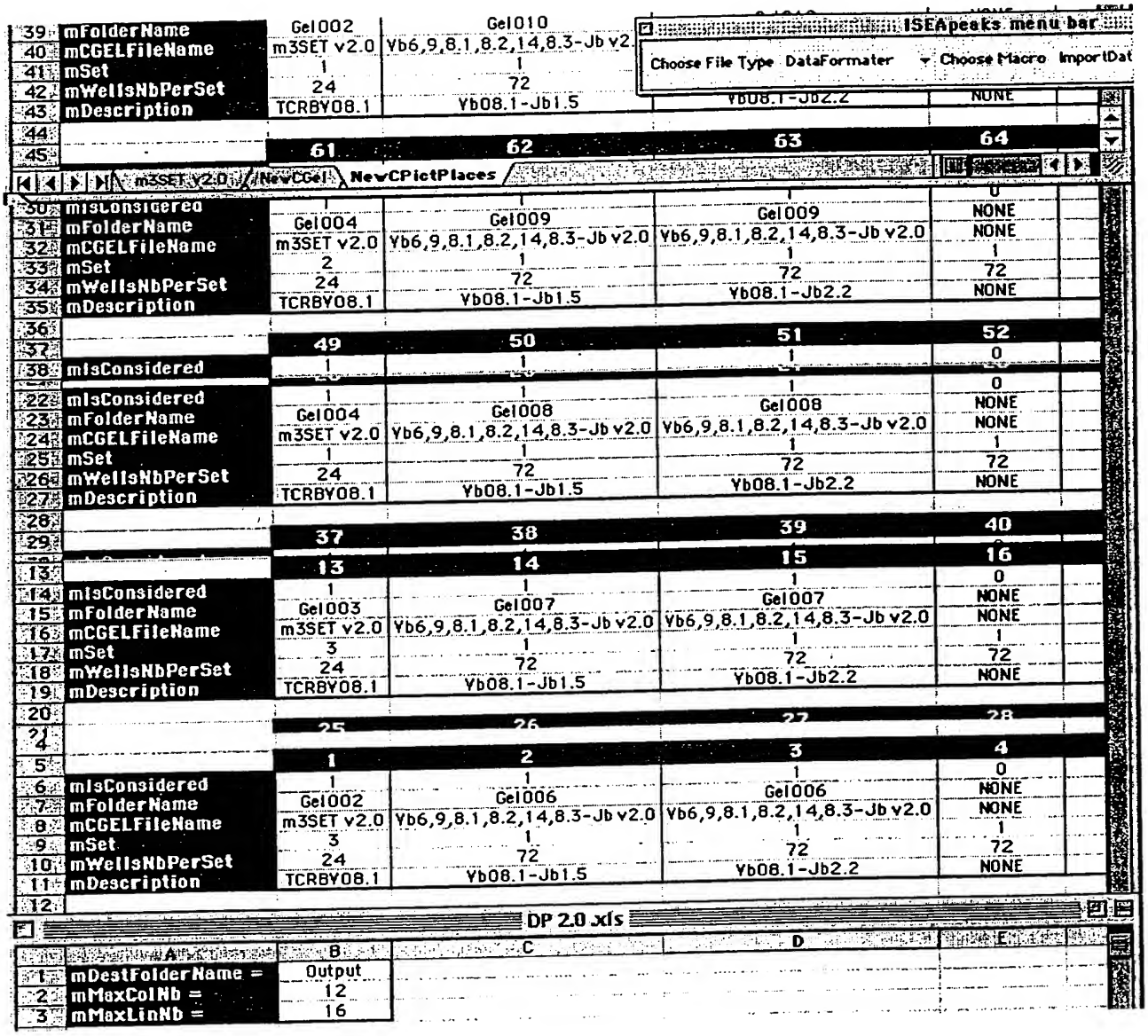
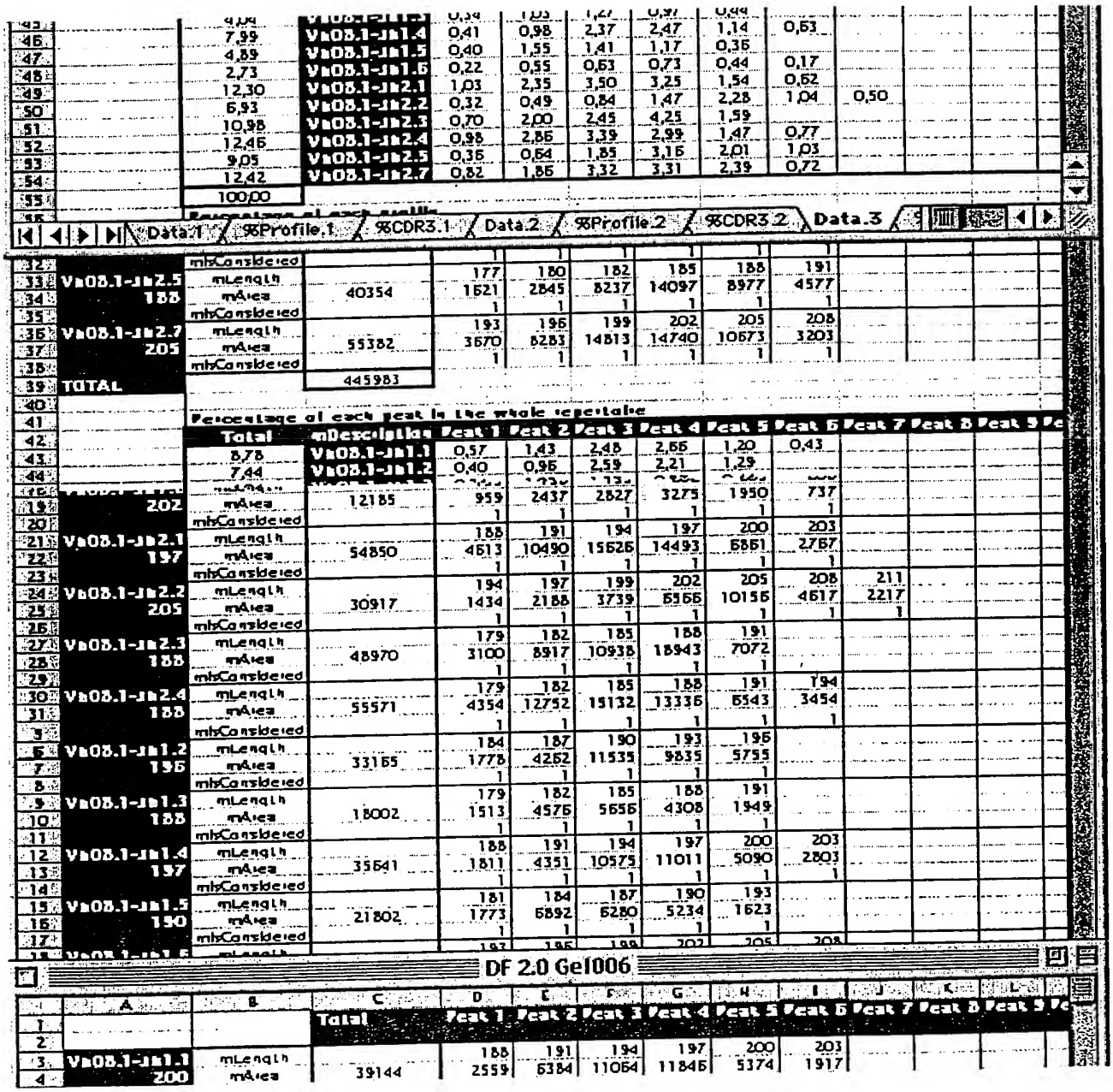
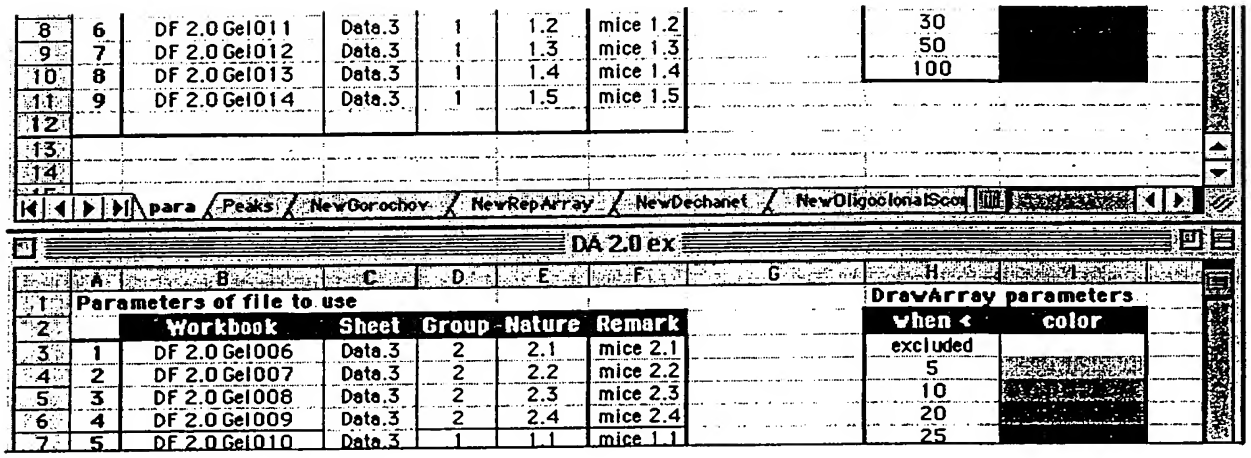

ISEApeaks menu bar
Choose File Type DataFormater
Choose Macro ImportDat
m3SET v2.0
NewCGel
NewCPictPlaces
DP 2.0.xls

FIG. 18



| | | |

FIG. 20



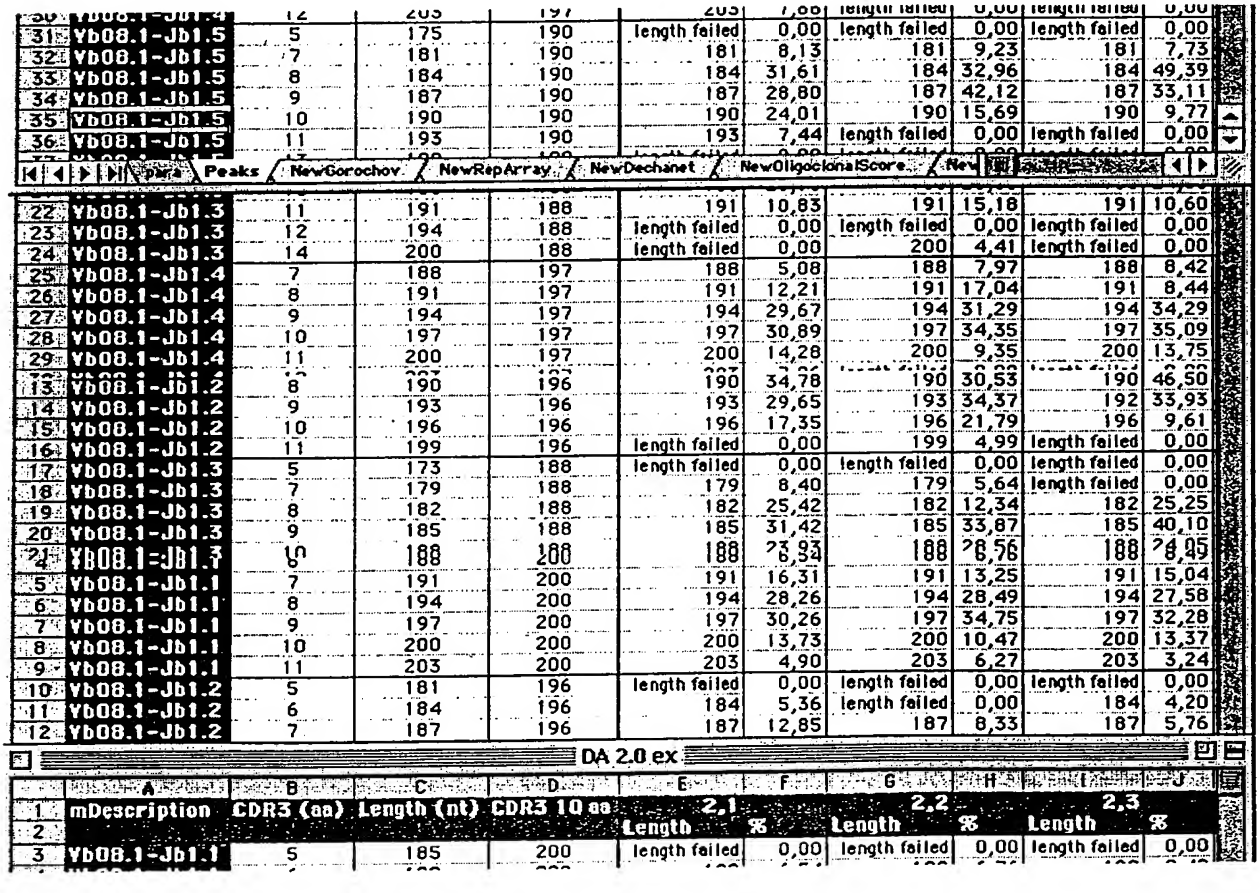
8	6	DF 2.0 Gel011	Data.3	1	1.2	mice 1.2
9	7	DF 2.0 Gel012	Data.3	1	1.3	mice 1.3
10	8	DF 2.0 Gel013	Data.3	1	1.4	mice 1.4
11	9	DF 2.0 Gel014	Data.3	1	1.5	mice 1.5
12						
13						
14						

30
50
100

para | Peaks | NewGorochov | NewRepArray | NewDechanet | NewOligoclonalScor

DA 2.0 ex

	A	B	C	D	E	F	G	H	I
1	Parameters of file to use							DrawArray parameters	
2		Workbook	Sheet	Group	Nature	Remark		when <	color
3	1	DF 2.0 Gel006	Data.3	2	2.1	mice 2.1		excluded	
4	2	DF 2.0 Gel007	Data.3	2	2.2	mice 2.2		5	
5	3	DF 2.0 Gel008	Data.3	2	2.3	mice 2.3		10	
6	4	DF 2.0 Gel009	Data.3	2	2.4	mice 2.4		20	
7	5	DF 2.0 Gel010	Data.3	1	1.1	mice 1.1		25	



31	Yb08.1-Jb1.5	5	175	190	length failed	0,00	length failed	0,00	length failed	0,00
32	Yb08.1-Jb1.5	7	181	190	181	8,13	181	9,23	181	7,73
33	Yb08.1-Jb1.5	8	184	190	184	31,61	184	32,96	184	49,39
34	Yb08.1-Jb1.5	9	187	190	187	28,80	187	42,12	187	33,11
35	Yb08.1-Jb1.5	10	190	190	190	24,01	190	15,69	190	9,77
36	Yb08.1-Jb1.5	11	193	190	193	7,44	length failed	0,00	length failed	0,00

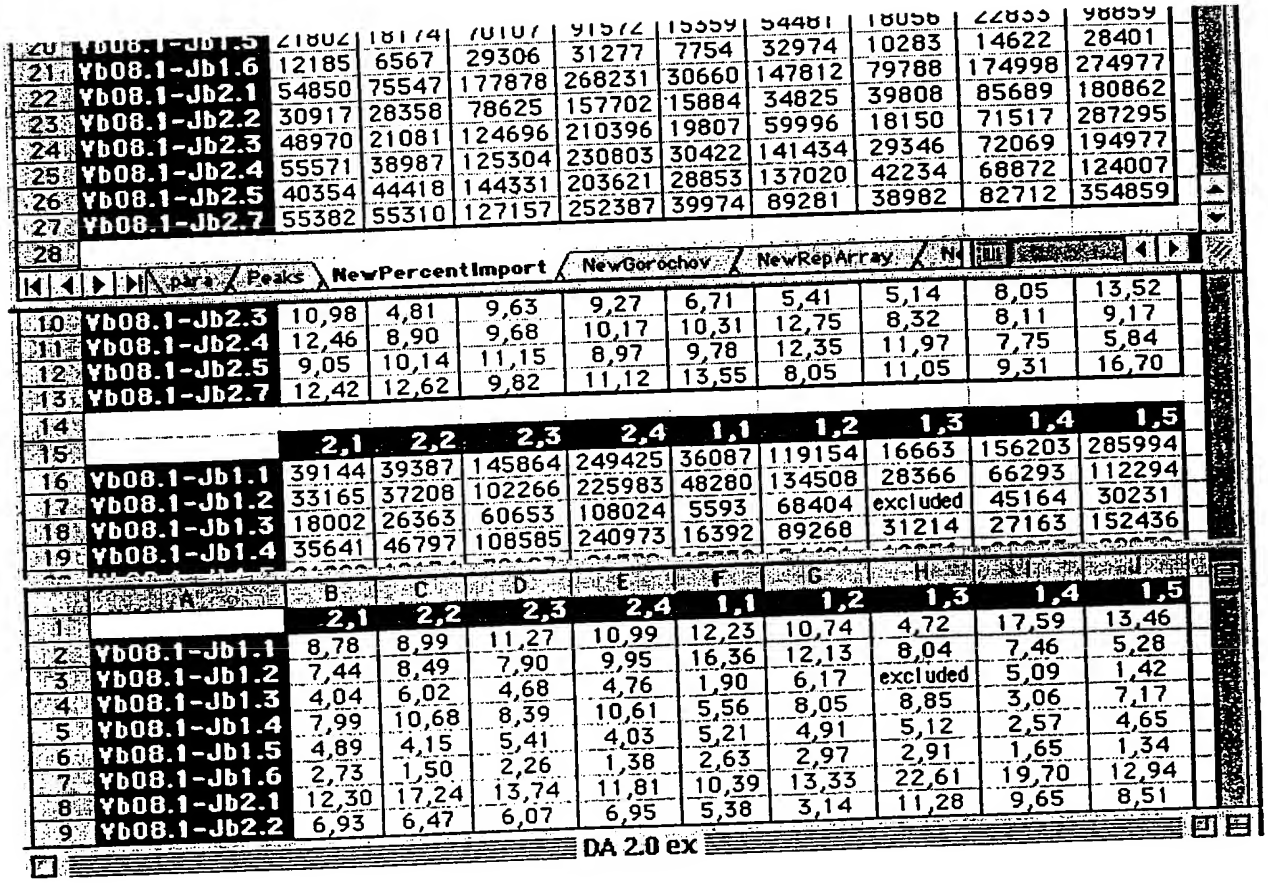
para | Peaks | NewGorochov | NewRepArray | NewDechanet | NewOligoclonalScore | Ne

22	Yb08.1-Jb1.3	11	191	188	191	10,83	191	15,18	191	10,60
23	Yb08.1-Jb1.3	12	194	188	length failed	0,00	length failed	0,00	length failed	0,00
24	Yb08.1-Jb1.3	14	200	188	length failed	0,00	200	4,41	length failed	0,00
25	Yb08.1-Jb1.4	7	188	197	188	5,08	188	7,97	188	8,42
26	Yb08.1-Jb1.4	8	191	197	191	12,21	191	17,04	191	8,44
27	Yb08.1-Jb1.4	9	194	197	194	29,67	194	31,29	194	34,29
28	Yb08.1-Jb1.4	10	197	197	197	30,89	197	34,35	197	35,09
29	Yb08.1-Jb1.4	11	200	197	200	14,28	200	9,35	200	13,75
13	Yb08.1-Jb1.2	8	190	196	190	34,78	190	30,53	190	46,50
14	Yb08.1-Jb1.2	9	193	196	193	29,65	193	34,37	192	33,93
15	Yb08.1-Jb1.2	10	196	196	196	17,35	196	21,79	196	9,61
16	Yb08.1-Jb1.2	11	199	196	length failed	0,00	199	4,99	length failed	0,00
17	Yb08.1-Jb1.3	5	173	188	length failed	0,00	length failed	0,00	length failed	0,00
18	Yb08.1-Jb1.3	7	179	188	179	8,40	179	5,64	length failed	0,00
19	Yb08.1-Jb1.3	8	182	188	182	25,42	182	12,34	182	25,25
20	Yb08.1-Jb1.3	9	185	188	185	31,42	185	33,87	185	40,10
21	Yb08.1-Jb1.3	10	188	188	188	23,93	188	28,56	188	24,05
4	Yb08.1-Jb1.1	6	188	200	188	6,34	188	6,76	188	8,49
5	Yb08.1-Jb1.1	7	191	200	191	16,31	191	13,25	191	15,04
6	Yb08.1-Jb1.1	8	194	200	194	28,26	194	28,49	194	27,58
7	Yb08.1-Jb1.1	9	197	200	197	30,26	197	34,75	197	32,28
8	Yb08.1-Jb1.1	10	200	200	200	13,73	200	10,47	200	13,37
9	Yb08.1-Jb1.1	11	203	200	203	4,90	203	6,27	203	3,24
10	Yb08.1-Jb1.2	5	181	196	length failed	0,00	length failed	0,00	length failed	0,00
11	Yb08.1-Jb1.2	6	184	196	184	5,36	length failed	0,00	184	4,20
12	Yb08.1-Jb1.2	7	187	196	187	12,85	187	8,33	187	5,76

DA 2.0 ex

	A	B	C	D	E	F	G	H	I	J
1	mDescription	CDR3 (aa)	Length (nt)	CDR3 10 aa	2,1		2,2		2,3	
2					Length	%	Length	%	Length	%
3	Yb08.1-Jb1.1	5	185	200	length failed	0,00	length failed	0,00	length failed	0,00

FIG. 21



20	Yb08.1-Jb1.5	21802	18174	70107	91572	15559	54481	18056	22855	98859
21	Yb08.1-Jb1.6	12185	6567	29306	31277	7754	32974	10283	14622	28401
22	Yb08.1-Jb2.1	54850	75547	177878	268231	30660	147812	79788	174998	274977
23	Yb08.1-Jb2.2	30917	28358	78625	157702	15884	34825	39808	85689	180862
24	Yb08.1-Jb2.3	48970	21081	124696	210396	19807	59996	18150	71517	287295
25	Yb08.1-Jb2.4	55571	38987	125304	230803	30422	141434	29346	72069	194977
26	Yb08.1-Jb2.5	40354	44418	144331	203621	28853	137020	42234	68872	124007
27	Yb08.1-Jb2.7	55382	55310	127157	252387	39974	89281	38982	82712	354859
28										

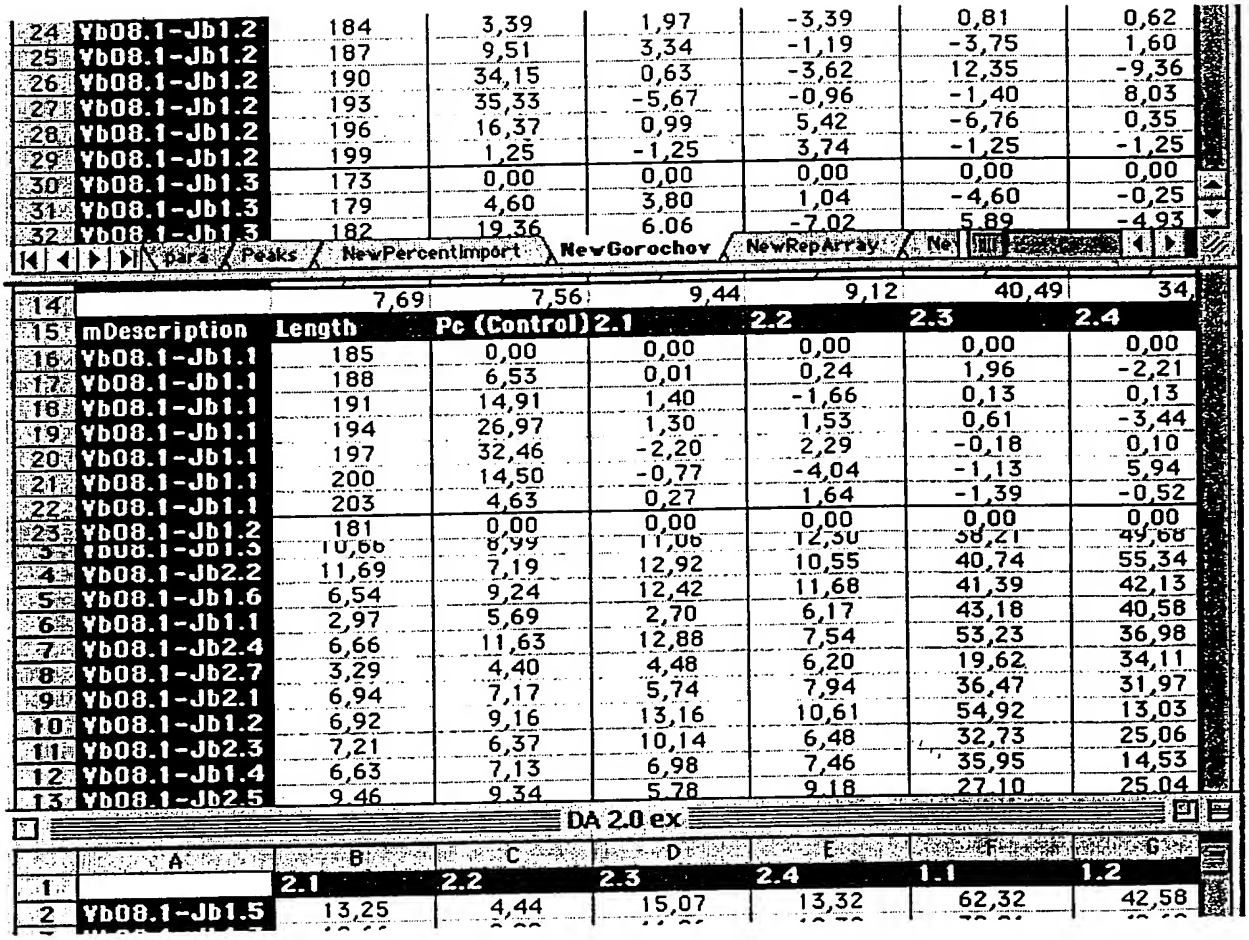
para / Peaks / NewPercentImport / NewGorochov / NewRepArray / N

10	Yb08.1-Jb2.3	10,98	4,81	9,63	9,27	6,71	5,41	5,14	8,05	13,52
11	Yb08.1-Jb2.4	12,46	8,90	9,68	10,17	10,31	12,75	8,32	8,11	9,17
12	Yb08.1-Jb2.5	9,05	10,14	11,15	8,97	9,78	12,35	11,97	7,75	5,84
13	Yb08.1-Jb2.7	12,42	12,62	9,82	11,12	13,55	8,05	11,05	9,31	16,70
14										
15		2,1	2,2	2,3	2,4	1,1	1,2	1,3	1,4	1,5
16	Yb08.1-Jb1.1	39144	39387	145864	249425	36087	119154	16663	156203	285994
17	Yb08.1-Jb1.2	33165	37208	102266	225983	48280	134508	28366	66293	112294
18	Yb08.1-Jb1.3	18002	26363	60653	108024	5593	68404	excluded	45164	30231
19	Yb08.1-Jb1.4	35641	46797	108585	240973	16392	89268	31214	27163	152436

	A	B	C	D	E	F	G	H	I	J
1		2,1	2,2	2,3	2,4	1,1	1,2	1,3	1,4	1,5
2	Yb08.1-Jb1.1	8,78	8,99	11,27	10,99	12,23	10,74	4,72	17,59	13,46
3	Yb08.1-Jb1.2	7,44	8,49	7,90	9,95	16,36	12,13	8,04	7,46	5,28
4	Yb08.1-Jb1.3	4,04	6,02	4,68	4,76	1,90	6,17	excluded	5,09	1,42
5	Yb08.1-Jb1.4	7,99	10,68	8,39	10,61	5,56	8,05	8,85	3,06	7,17
6	Yb08.1-Jb1.5	4,89	4,15	5,41	4,03	5,21	4,91	5,12	2,57	4,65
7	Yb08.1-Jb1.6	2,73	1,50	2,26	1,38	2,63	2,97	2,91	1,65	1,34
8	Yb08.1-Jb2.1	12,30	17,24	13,74	11,81	10,39	13,33	22,61	19,70	12,94
9	Yb08.1-Jb2.2	6,93	6,47	6,07	6,95	5,38	3,14	11,28	9,65	8,51

DA 2.0 ex

FIG. 22



24	YbO8.1-Jb1.2	184	3,39	1,97	-3,39	0,81	0,62
25	YbO8.1-Jb1.2	187	9,51	3,34	-1,19	-3,75	1,60
26	YbO8.1-Jb1.2	190	34,15	0,63	-3,62	12,35	-9,36
27	YbO8.1-Jb1.2	193	35,33	-5,67	-0,96	-1,40	8,03
28	YbO8.1-Jb1.2	196	16,37	0,99	5,42	-6,76	0,35
29	YbO8.1-Jb1.2	199	1,25	-1,25	3,74	-1,25	-1,25
30	YbO8.1-Jb1.3	173	0,00	0,00	0,00	0,00	0,00
31	YbO8.1-Jb1.3	179	4,60	3,80	1,04	-4,60	-0,25
32	YbO8.1-Jb1.3	182	19,36	6.06	-7,02	5,89	-4,93

Para / Peaks / NewPercentImport / NewGorochov / NewRepArray / Ne

14		7,69	7,56	9,44	9,12	40,49	34,
15	mDescription	Length	Pc (Control)	2.1	2.2	2.3	2.4
16	YbO8.1-Jb1.1	185	0,00	0,00	0,00	0,00	0,00
17	YbO8.1-Jb1.1	188	6,53	0,01	0,24	1,96	-2,21
18	YbO8.1-Jb1.1	191	14,91	1,40	-1,66	0,13	0,13
19	YbO8.1-Jb1.1	194	26,97	1,30	1,53	0,61	-3,44
20	YbO8.1-Jb1.1	197	32,46	-2,20	2,29	-0,18	0,10
21	YbO8.1-Jb1.1	200	14,50	-0,77	-4,04	-1,13	5,94
22	YbO8.1-Jb1.1	203	4,63	0,27	1,64	-1,39	-0,52
23	YbO8.1-Jb1.2	181	0,00	0,00	0,00	0,00	0,00
3	YbO8.1-Jb1.3	10,66	8,99	11,06	12,30	38,21	49,68
4	YbO8.1-Jb2.2	11,69	7,19	12,92	10,55	40,74	55,34
5	YbO8.1-Jb1.6	6,54	9,24	12,42	11,68	41,39	42,13
6	YbO8.1-Jb1.1	2,97	5,69	2,70	6,17	43,18	40,58
7	YbO8.1-Jb2.4	6,66	11,63	12,88	7,54	53,23	36,98
8	YbO8.1-Jb2.7	3,29	4,40	4,48	6,20	19,62	34,11
9	YbO8.1-Jb2.1	6,94	7,17	5,74	7,94	36,47	31,97
10	YbO8.1-Jb1.2	6,92	9,16	13,16	10,61	54,92	13,03
11	YbO8.1-Jb2.3	7,21	6,37	10,14	6,48	32,73	25,06
12	YbO8.1-Jb1.4	6,63	7,13	6,98	7,46	35,95	14,53
13	YbO8.1-Jb2.5	9,46	9,34	5,78	9,18	27,10	25,04

DA 2.0 ex

	A	B	C	D	E	F	G
1		2.1	2.2	2.3	2.4	1.1	1.2
2	YbO8.1-Jb1.5	13,25	4,44	15,07	13,32	62,32	42,58

FIG. 23

25	Vb08.1-Jb1.2	5	181	0,00	0,00	0,00	0,00
26	Vb08.1-Jb1.2	6	184	0,28	0,01	0,08	0,00
27	Vb08.1-Jb1.2	7	187	0,81	0,02	0,01	0,12
28	Vb08.1-Jb1.2	8	190	2,83	0,06	0,06	0,71
29	Vb08.1-Jb1.2	9	193	3,03	0,68	0,01	0,12
30	Vb08.1-Jb1.2	10	196	1,39	0,01	0,21	0,40
31	Vb08.1-Jb1.2	11	199	0,11	0,01	0,10	0,01
32	Vb08.1-Jb1.3	5	173	0,00	0,00	0,00	0,00

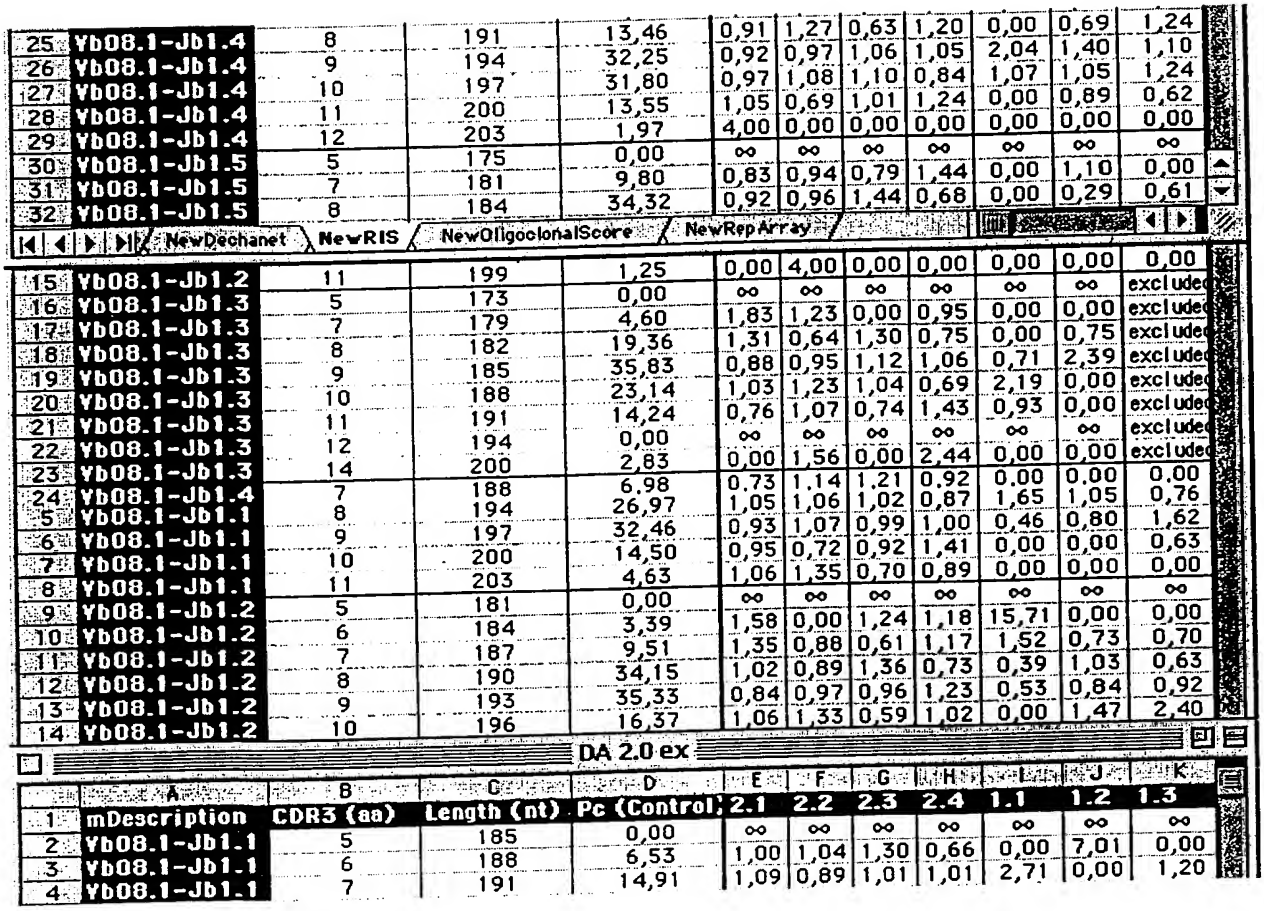
Vpaca / Peaks / NewPercentImport / NewGorochov / NewDechanet / NewRepA

15							
16							
17	mDescription	CDR3 (aa)	PCR length	Pc (Control)	2,1	2,2	2,3
18	Vb08.1-Jb1.1	5	185	0,00	0,00	0,00	0,00
19	Vb08.1-Jb1.1	6	188	0,65	0,01	0,00	0,09
20	Vb08.1-Jb1.1	7	191	1,49	0,00	0,09	0,04
21	Vb08.1-Jb1.1	8	194	2,68	0,04	0,01	0,18
22	Vb08.1-Jb1.1	9	197	3,25	0,35	0,02	0,15
23	Vb08.1-Jb1.1	10	200	1,47	0,07	0,28	0,00
24	Vb08.1-Jb1.1	11	203	0,45	0,00	0,01	0,01
5	Vb08.1-Jb1.3	0,62	0,72	0,45	0,55	1,67	3,78
6	Vb08.1-Jb1.4	1,06	0,98	0,65	0,88	2,31	1,13
7	Vb08.1-Jb1.5	0,60	0,30	1,07	0,74	3,96	2,58
8	Vb08.1-Jb1.6	0,35	0,25	0,31	0,36	1,10	1,22
9	Vb08.1-Jb2.1	1,25	2,08	0,67	1,24	4,13	4,81
10	Vb08.1-Jb2.2	0,72	0,38	0,59	0,63	2,07	2,19
11	Vb08.1-Jb2.3	1,46	1,93	0,95	0,74	2,62	2,39
12	Vb08.1-Jb2.4	1,20	1,34	0,97	0,59	6,17	4,18
13	Vb08.1-Jb2.5	1,00	1,09	0,86	0,87	2,82	3,41
14	Vb08.1-Jb2.7	0,58	0,55	0,72	0,65	2,78	2,80

DA 2.0 ex

	A	B	C	D	E	F	G
1	Dechanet scores	2,1	2,2	2,3	2,4	1,1	1,2
2	Sample	3,20	3,74	2,76	2,92	14,41	11,07
3	Vb08.1-Jb1.1	0,69	0,65	0,69	0,88	4,94	4,81
4	Vb08.1-Jb1.2	0,89	0,69	1,17	1,41	8,72	2,25

FIG. 24



25	YbO8.1-Jb1.4	8	191	13,46	0,91	1,27	0,63	1,20	0,00	0,69	1,24
26	YbO8.1-Jb1.4	9	194	32,25	0,92	0,97	1,06	1,05	2,04	1,40	1,10
27	YbO8.1-Jb1.4	10	197	31,80	0,97	1,08	1,10	0,84	1,07	1,05	1,24
28	YbO8.1-Jb1.4	11	200	13,55	1,05	0,69	1,01	1,24	0,00	0,89	0,62
29	YbO8.1-Jb1.4	12	203	1,97	4,00	0,00	0,00	0,00	0,00	0,00	0,00
30	YbO8.1-Jb1.5	5	175	0,00	∞	∞	∞	∞	∞	∞	∞
31	YbO8.1-Jb1.5	7	181	9,80	0,83	0,94	0,79	1,44	0,00	1,10	0,00
32	YbO8.1-Jb1.5	8	184	34,32	0,92	0,96	1,44	0,68	0,00	0,29	0,61

NewDechanet | NewRIS | NewOligoclonalScore | NewRepArray

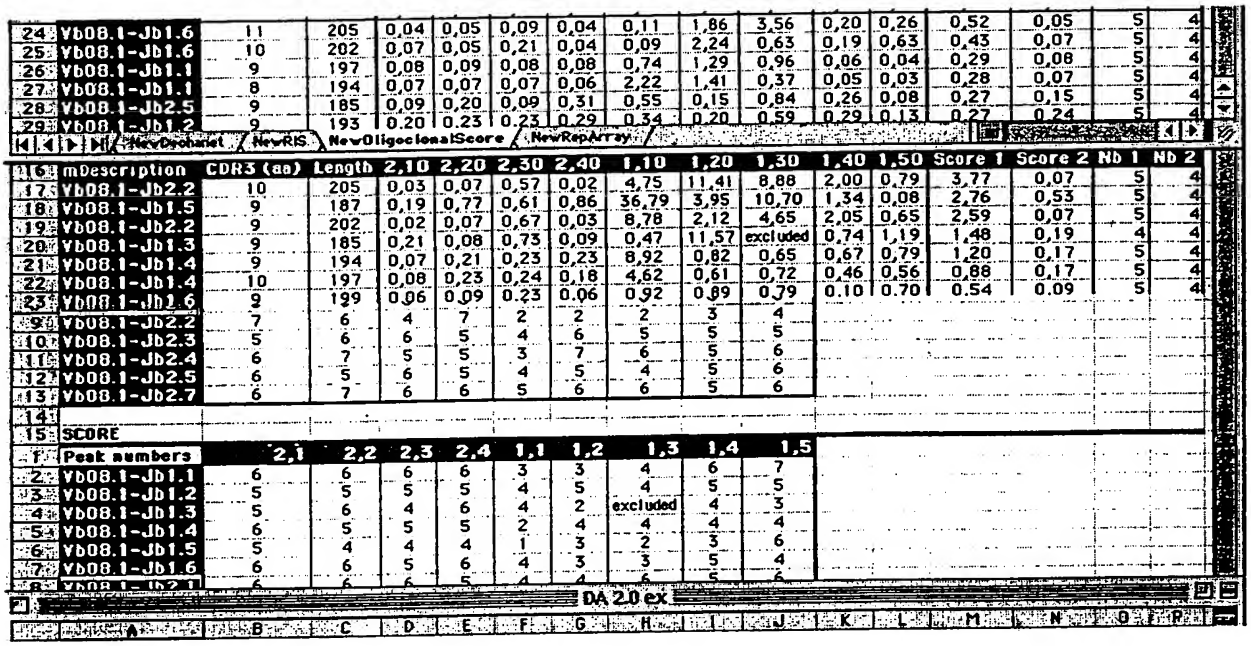
15	YbO8.1-Jb1.2	11	199	1,25	0,00	4,00	0,00	0,00	0,00	0,00	0,00
16	YbO8.1-Jb1.3	5	173	0,00	∞	∞	∞	∞	∞	∞	excluded
17	YbO8.1-Jb1.3	7	179	4,60	1,83	1,23	0,00	0,95	0,00	0,00	excluded
18	YbO8.1-Jb1.3	8	182	19,36	1,31	0,64	1,30	0,75	0,00	0,75	excluded
19	YbO8.1-Jb1.3	9	185	35,83	0,88	0,95	1,12	1,06	0,71	2,39	excluded
20	YbO8.1-Jb1.3	10	188	23,14	1,03	1,23	1,04	0,69	2,19	0,00	excluded
21	YbO8.1-Jb1.3	11	191	14,24	0,76	1,07	0,74	1,43	0,93	0,00	excluded
22	YbO8.1-Jb1.3	12	194	0,00	∞	∞	∞	∞	∞	∞	excluded
23	YbO8.1-Jb1.3	14	200	2,83	0,00	1,56	0,00	2,44	0,00	0,00	excluded
24	YbO8.1-Jb1.4	7	188	6,98	0,73	1,14	1,21	0,92	0,00	0,00	0,00
5	YbO8.1-Jb1.1	8	194	26,97	1,05	1,06	1,02	0,87	1,65	1,05	0,76
6	YbO8.1-Jb1.1	9	197	32,46	0,93	1,07	0,99	1,00	0,46	0,80	1,62
7	YbO8.1-Jb1.1	10	200	14,50	0,95	0,72	0,92	1,41	0,00	0,00	0,63
8	YbO8.1-Jb1.1	11	203	4,63	1,06	1,35	0,70	0,89	0,00	0,00	0,00
9	YbO8.1-Jb1.2	5	181	0,00	∞	∞	∞	∞	∞	∞	∞
10	YbO8.1-Jb1.2	6	184	3,39	1,58	0,00	1,24	1,18	15,71	0,00	0,00
11	YbO8.1-Jb1.2	7	187	9,51	1,35	0,88	0,61	1,17	1,52	0,73	0,70
12	YbO8.1-Jb1.2	8	190	34,15	1,02	0,89	1,36	0,73	0,39	1,03	0,63
13	YbO8.1-Jb1.2	9	193	35,33	0,84	0,97	0,96	1,23	0,53	0,84	0,92
14	YbO8.1-Jb1.2	10	196	16,37	1,06	1,33	0,59	1,02	0,00	1,47	2,40

DA 2.0 ex

	A	B	C	D	E	F	G	H	I	J	K
1	mDescription	CDR3 (aa)	Length (nt)	Pc (Control)	2.1	2.2	2.3	2.4	1.1	1.2	1.3
2	YbO8.1-Jb1.1	5	185	0,00	∞	∞	∞	∞	∞	∞	∞
3	YbO8.1-Jb1.1	6	188	6,53	1,00	1,04	1,30	0,66	0,00	7,01	0,00
4	YbO8.1-Jb1.1	7	191	14,91	1,09	0,89	1,01	1,01	2,71	0,00	1,20

FIG. 25

FIG. 26



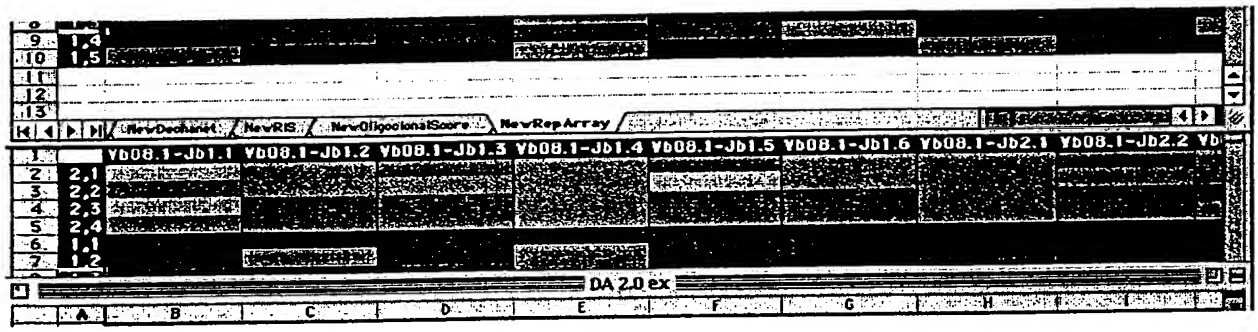
24	Vb08.1-Jb1.6	11	205	0,04	0,05	0,09	0,04	0,11	1,86	3,56	0,20	0,26	0,52	0,05	5	4
25	Vb08.1-Jb1.6	10	202	0,07	0,05	0,21	0,04	0,09	2,24	0,63	0,19	0,63	0,43	0,07	5	4
26	Vb08.1-Jb1.1	9	197	0,08	0,09	0,08	0,08	0,74	1,29	0,96	0,06	0,04	0,29	0,08	5	4
27	Vb08.1-Jb1.1	8	194	0,07	0,07	0,07	0,06	2,22	1,41	0,37	0,05	0,03	0,28	0,07	5	4
28	Vb08.1-Jb2.5	9	185	0,09	0,20	0,09	0,31	0,55	0,15	0,84	0,26	0,08	0,27	0,15	5	4
29	Vb08.1-Jb1.2	9	193	0,20	0,23	0,23	0,29	0,34	0,20	0,59	0,29	0,13	0,27	0,24	5	4

NewDecharet | NewRIS | NewOligocionalScore | NewRepArray

	mDescription	CDR3 (aa)	Length	2,10	2,20	2,30	2,40	1,10	1,20	1,30	1,40	1,50	Score 1	Score 2	Nb 1	Nb 2
17	Vb08.1-Jb2.2	10	205	0,03	0,07	0,57	0,02	4,75	11,41	8,88	2,00	0,79	3,77	0,07	5	4
18	Vb08.1-Jb1.5	9	187	0,19	0,77	0,61	0,86	36,79	3,95	10,70	1,34	0,08	2,76	0,53	5	4
19	Vb08.1-Jb2.2	9	202	0,02	0,07	0,67	0,03	8,78	2,12	4,65	2,05	0,65	2,59	0,07	5	4
20	Vb08.1-Jb1.3	9	185	0,21	0,08	0,73	0,09	0,47	11,57	excluded	0,74	1,19	1,48	0,19	4	4
21	Vb08.1-Jb1.4	9	194	0,07	0,21	0,23	0,23	8,92	0,82	0,65	0,67	0,79	1,20	0,17	5	4
22	Vb08.1-Jb1.4	10	197	0,08	0,23	0,24	0,18	4,62	0,61	0,72	0,46	0,56	0,88	0,17	5	4
23	Vb08.1-Jb1.6	9	199	0,06	0,09	0,23	0,06	0,92	0,89	0,79	0,10	0,70	0,54	0,09	5	4
9	Vb08.1-Jb2.2	7	6	4	7	2	2	2	3	4						
10	Vb08.1-Jb2.3	5	6	6	5	4	6	5	5	5						
11	Vb08.1-Jb2.4	6	7	5	5	3	7	6	5	6						
12	Vb08.1-Jb2.5	6	5	6	5	4	5	4	5	6						
13	Vb08.1-Jb2.7	6	7	6	6	5	6	6	5	6						

	SCORE									
1	Peak numbers	2,1	2,2	2,3	2,4	1,1	1,2	1,3	1,4	1,5
2	Vb08.1-Jb1.1	6	6	6	6	3	3	4	6	7
3	Vb08.1-Jb1.2	5	5	5	5	4	5	4	5	5
4	Vb08.1-Jb1.3	5	6	4	6	4	2	excluded	4	3
5	Vb08.1-Jb1.4	6	5	5	5	2	4	4	4	4
6	Vb08.1-Jb1.5	5	4	4	4	1	3	2	3	6
7	Vb08.1-Jb1.6	6	6	5	6	4	3	3	5	4

DA 2.0 ex



NewDecharet | NewRIS | NewOligocionalScore | NewRepArray

		Vb08.1-Jb1.1	Vb08.1-Jb1.2	Vb08.1-Jb1.3	Vb08.1-Jb1.4	Vb08.1-Jb1.5	Vb08.1-Jb1.6	Vb08.1-Jb2.1	Vb08.1-Jb2.2	Vb
2	2,1									
3	2,2									
4	2,3									
5	2,4									
6	1,1									
7	1,2									

DA 2.0 ex

FIG. 27

Depiction of overall disturbance

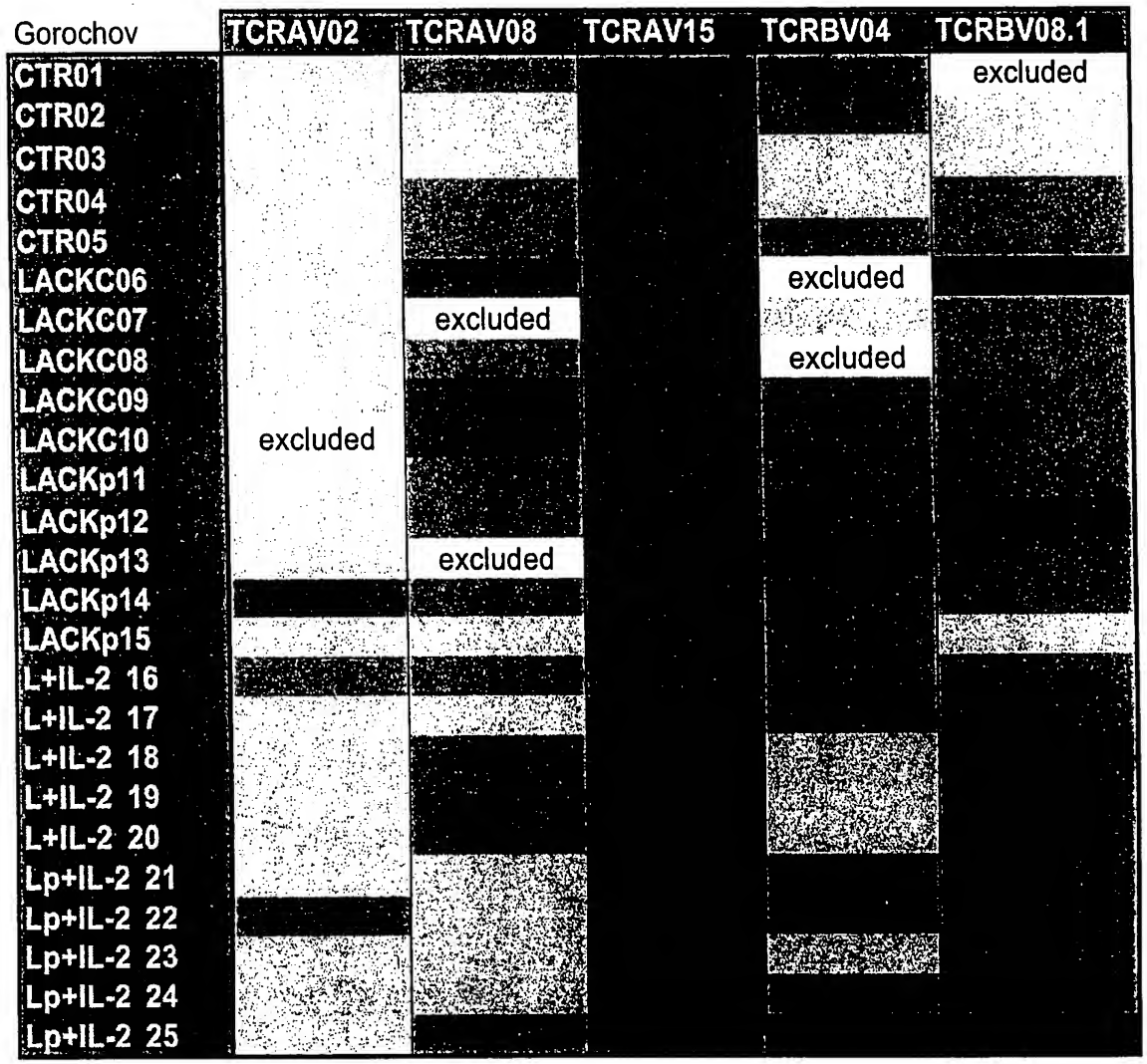


FIG. 28A

Depiction of overall disturbance

Gorochov	TCRAV02	TCRAV08	TCRAV15	TCRBV04	TCRBV08.1
CTR01	1,94	5,17	16,38	7,82	excluded
CTR02	0,63	3,77	19,38	5,23	2,82
CTR03	2,02	2,32	11,74	4,74	3,22
CTR04	2,81	7,01	11,51	2,80	5,55
CTR05	0,82	7,29	11,99	5,03	7,24
LACKC06	2,44	14,70	17,39	excluded	43,90
LACKC07	2,23	excluded	17,82	4,25	8,94
LACKC08	2,12	7,71	18,51	excluded	5,66
LACKC09	0,79	11,32	18,32	6,00	5,46
LACKC10	excluded	11,38	15,27	5,60	9,13
LACKp11	2,15	8,99	16,37	9,01	5,81
LACKp12	2,34	9,68	20,34	6,97	10,19
LACKp13	4,27	excluded	16,72	12,33	9,34
LACKp14	10,36	7,12	16,63	6,22	6,59
LACKp15	2,79	3,09	20,18	8,52	3,89
L+IL-2 16	5,17	6,09	19,78	5,63	8,77
L+IL-2 17	4,51	2,94	16,81	6,25	8,94
L+IL-2 18	2,29	5,91	19,72	4,14	10,65
L+IL-2 19	2,52	9,62	18,48	4,89	8,58
L+IL-2 20	4,53	7,69	20,02	4,76	6,80
Lp+IL-2 21	2,55	4,89	19,57	5,47	8,78
Lp+IL-2 22	5,50	4,15	14,00	6,33	7,12
Lp+IL-2 23	2,33	3,19	18,08	4,43	9,80
Lp+IL-2 24	3,27	4,84	20,00	7,23	10,53
Lp+IL-2 25	4,83	5,70	19,00	36,51	35,78

DrawArray parameters

when <	color
excluded	
5	
10	
20	
25	
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100	

FIG. 28 B

Depiction of overall disturbance versus oligocionality

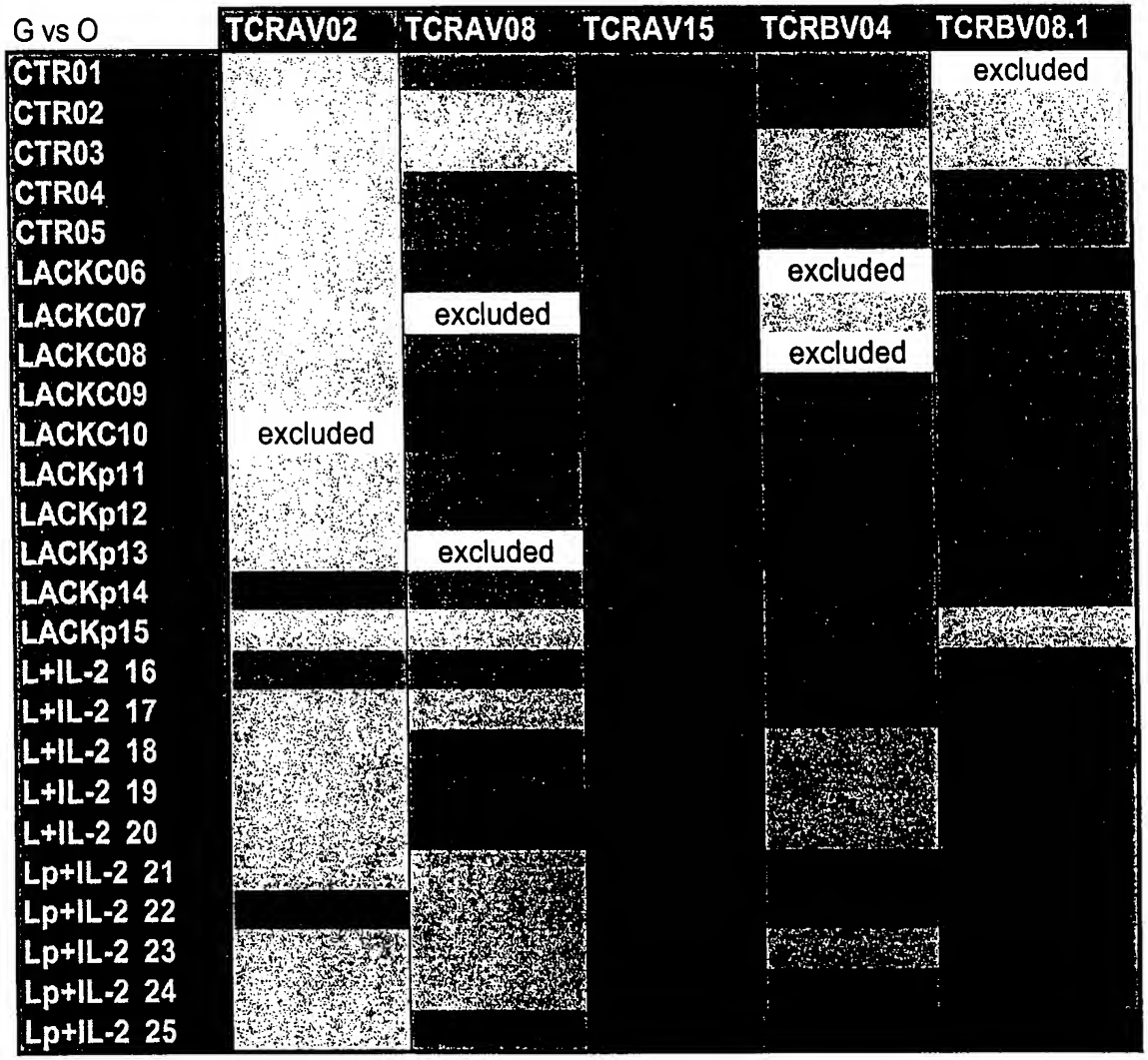

FIG 28 C

Depiction of overall disturbance versus oligocionality

G vs O	TCRAV02	TCRAV08	TCRAV15	TCRBV04	TCRBV08.1
CTR01	1,94	5,17	16,38	7,82	excluded
CTR02	0,63	3,77	19,38	5,23	2,82
CTR03	2,02	2,32	11,74	4,74	3,22
CTR04	2,81	7,01	11,51	2,80	5,55
CTR05	0,82	7,29	11,99	5,03	7,24
LACKC06	2,44	14,70	17,39	excluded	43,90
LACKC07	2,23	excluded	17,82	4,25	8,94
LACKC08	2,12	7,71	18,51	excluded	5,66
LACKC09	0,79	11,32	18,32	6,00	5,46
LACKC10	excluded	11,38	15,27	5,60	9,13
LACKp11	2,15	8,99	16,37	9,01	5,81
LACKp12	2,34	9,68	20,34	6,97	10,19
LACKp13	4,27	excluded	16,72	12,33	9,34
LACKp14	10,36	7,12	16,63	6,22	6,59
LACKp15	2,79	3,09	20,18	8,52	3,89
L+IL-2 16	5,17	6,09	19,78	5,63	8,77
L+IL-2 17	4,51	2,94	16,81	6,25	8,94
L+IL-2 18	2,29	5,91	19,72	4,14	10,65
L+IL-2 19	2,52	9,62	18,48	4,89	8,58
L+IL-2 20	4,53	7,69	20,02	4,76	6,80
Lp+IL-2 21	2,55	4,89	19,57	5,47	8,78
Lp+IL-2 22	5,50	4,15	14,00	6,33	7,12
Lp+IL-2 23	2,33	3,19	18,08	4,43	9,80
Lp+IL-2 24	3,27	4,84	20,00	7,23	10,53
Lp+IL-2 25	4,83	5,70	19,00	36,51	35,78

DrawArray parameters

when <	color
excluded	
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FIG. 28 D

Parameters of file to use

	Workbook	Sheet	Group	Nature	Remarks
1	DF CC/281 AC by EF Delta1	Data.1	1	CTR01	
2	DF CC/281 AC by EF Delta1	Data.2	1	CTR02	
3	DF CC/281 AC by EF Delta1	Data.3	1	CTR03	
4	DF CC/281 AC by EF Delta1	Data.4	1	CTR04	
5	DF CC/281 AC by EF Delta1	Data.5	1	CTR05	
6	DF CC/281 AC by EF Delta1	Data.6	2	LACKC06	
7	DF CC/281 AC by EF Delta1	Data.7	2	LACKC07	
8	DF CC/281 AC by EF Delta1	Data.8	2	LACKC08	
9	DF CC/281 AC by EF Delta1	Data.9	2	LACKC09	
10	DF CC/281 AC by EF Delta1	Data.10	2	LACKC10	
11	DF CC/281 AC by EF Delta1	Data.11	3	LACKp11	
12	DF CC/281 AC by EF Delta1	Data.12	3	LACKp12	
13	DF CC/282 AC by EF Delta1	Data.1	3	LACKp13	
14	DF CC/282 AC by EF Delta1	Data.2	3	LACKp14	
15	DF CC/282 AC by EF Delta1	Data.3	3	LACKp15	
16	DF CC/282 AC by EF Delta1	Data.4	4	+IL-2 16	
17	DF CC/282 AC by EF Delta1	Data.5	4	+IL-2 17	
18	DF CC/282 AC by EF Delta1	Data.6	4	+IL-2 18	
19	DF CC/282 AC by EF Delta1	Data.7	4	+IL-2 19	
20	DF CC/282 AC by EF Delta1	Data.8	4	+IL-2 20	
21	DF CC/282 AC by EF Delta1	Data.9	5	p+IL-2 21	
22	DF CC/282 AC by EF Delta1	Data.10	5	p+IL-2 22	
23	DF CC/282 AC by EF Delta1	Data.11	5	p+IL-2 23	
24	DF CC/282 AC by EF Delta1	Data.12	5	p+IL-2 24	
25	DF CC/283 AC by EF Delta1	Data.1	5	p+IL-2 25	

DrawArray parameters

when <	color
excluded	
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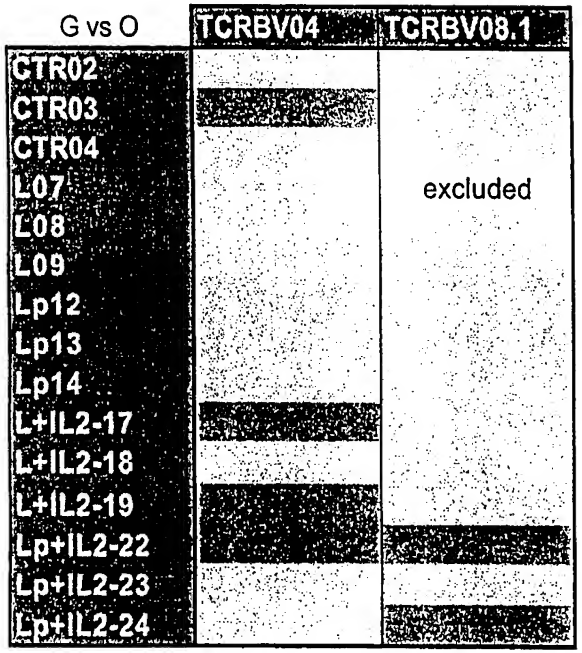
FIG. 29

FIG. 30A

Depiction of overall disturbance versus oligocionality



G vs O	TCRBV04	TCRBV08.1
CTR02	2,65	3,64
CTR03	6,28	1,58
CTR04	5,00	4,08
L07	0,43	excluded
L08	1,28	1,15
L09	1,13	0,79
Lp12	0,87	3,53
Lp13	0,81	2,90
Lp14	2,98	2,79
L+IL2-17	8,38	3,32
L+IL2-18	3,14	3,21
L+IL2-19	5,35	3,13
Lp+IL2-22	9,22	6,56
Lp+IL2-23	2,44	3,64
Lp+IL2-24	2,37	5,07

DrawArray parameters

when <	color
excluded	
5	
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20	
25	
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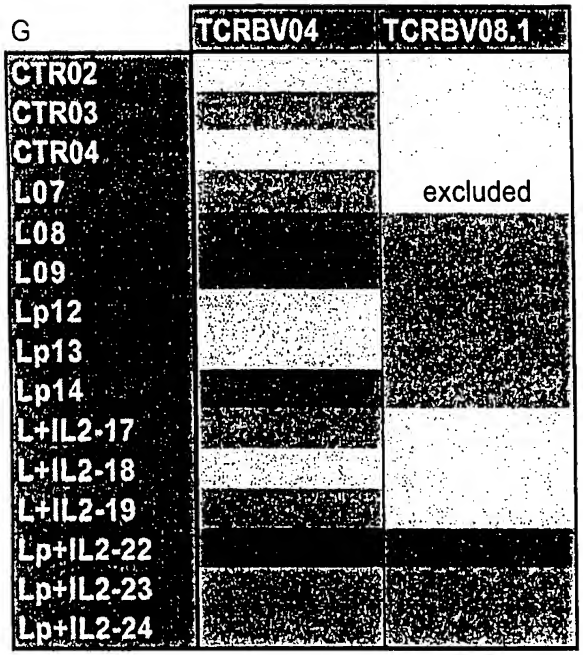
100	

Depiction of overall disturbance



G	TCRBV04	TCRBV08.1
CTR02	2,65	3,64
CTR03	6,28	1,58
CTR04	5,00	4,08
L07	5,10	excluded
L08	15,13	7,88
L09	13,36	5,43
Lp12	3,45	6,47
Lp13	3,20	5,31
Lp14	11,82	5,12
L+IL2-17	8,57	4,82
L+IL2-18	3,22	4,67
L+IL2-19	5,47	4,55
Lp+IL2-22	24,33	10,36
Lp+IL2-23	6,44	5,75
Lp+IL2-24	6,26	8,01

DrawArray parameters

when <	color
excluded	
5	
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100	

FIG. 30B

FIG. 31

Parameters of file to use

	Workbook	Sheet	Group	Nature	Remark
1	EF/06 DF	Data.1	1	CTR02	CTR02
2	EF/06 DF	Data.2	1	CTR03	CTR03
3	EF/06 DF	Data.3	1	CTR04	CTR04
4	EF/06 DF	Data.4	2	L07	Lack 07
5	EF/06 DF	Data.5	2	L08	Lack 08
6	EF/06 DF	Data.6	2	L09	Lack 09
7	EF/06 DF	Data.7	3	Lp12	Lackp12
8	EF/06 DF	Data.8	3	Lp13	Lackp13
9	EF/06 DF	Data.9	3	Lp14	Lackp14
10	EF/06 DF	Data.10	4	L+IL2-17	Lack+IL2-17
11	EF/06 DF	Data.11	4	L+IL2-18	Lack+IL2-18
12	EF/06 DF	Data.12	4	L+IL2-19	Lack+IL2-19
13	EF/06 DF	Data.13	5	Lp+IL2-22	Lackp+IL2-22
14	EF/06 DF	Data.14	5	Lp+IL2-23	Lackp+IL2-23
15	EF/06 DF	Data.15	5	Lp+IL2-24	Lackp+IL2-24

DrawArray parameters

when <	color
excluded	
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20	
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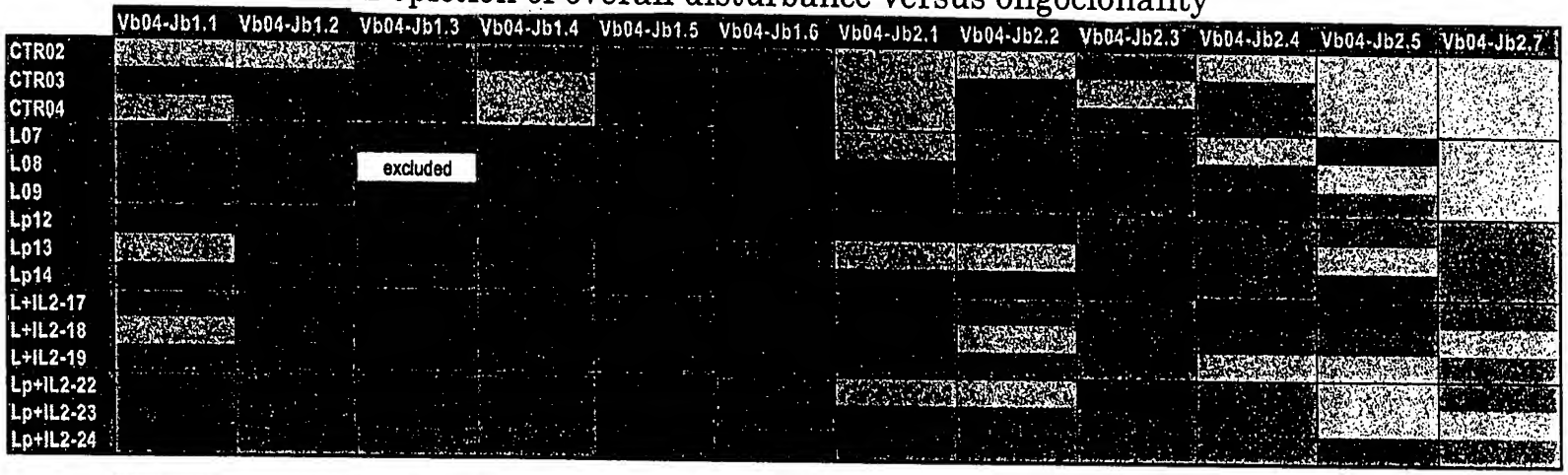
50	
100	

Depiction of overall disturbance versus oligocionality

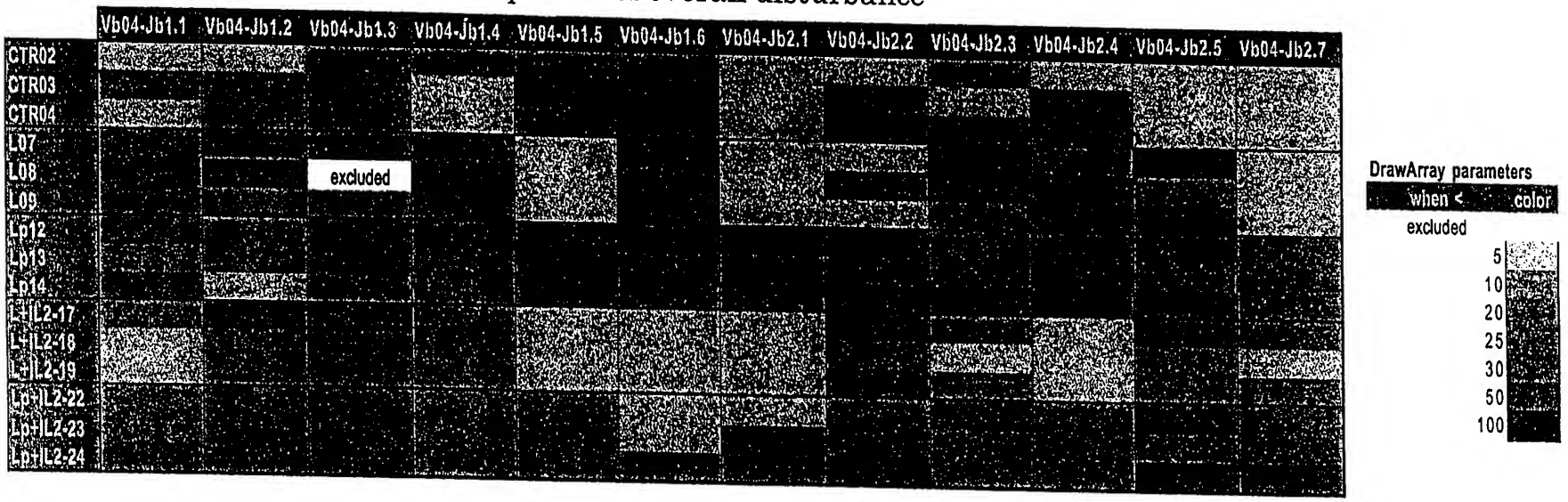


	Vb04-Jb1.1	Vb04-Jb1.2	Vb04-Jb1.3	Vb04-Jb1.4	Vb04-Jb1.5	Vb04-Jb1.6	Vb04-Jb2.1	Vb04-Jb2.2	Vb04-Jb2.3	Vb04-Jb2.4	Vb04-Jb2.5	Vb04-Jb2.7
CTR02	3,73	3,35	9,51	5,71	8,96	5,76	4,33	4,19	6,10	4,02	2,96	1,96
CTR03	5,05	5,44	7,60	4,39	13,10	12,42	3,57	6,04	2,08	5,17	3,25	2,75
CTR04	4,24	5,03	8,97	4,93	8,57	13,31	4,60	7,71	6,75	5,23	2,85	3,48
L07	5,30	5,71	11,55	6,52	9,23	20,00	3,99	8,61	7,00	4,83	14,72	4,38
L08	7,86	7,73	excluded	7,10	9,74	12,12	9,55	13,33	8,83	8,66	3,72	3,51
L09	8,95	6,90	11,77	11,78	24,19	19,05	7,24	7,07	5,06	10,42	5,55	3,76
Lp12	15,89	19,08	10,26	11,05	23,35	22,64	14,00	11,38	6,75	9,20	9,44	9,20
Lp13	3,57	26,66	12,26	7,75	13,14	9,44	4,63	4,32	7,82	7,13	3,94	6,00
Lp14	12,24	14,09	6,25	7,13	18,10	16,54	7,66	11,28	11,52	5,21	14,17	6,59
L+IL2-17	7,54	10,06	11,95	6,84	7,39	20,34	5,32	7,10	9,57	11,98	10,44	6,03
L+IL2-18	4,81	6,37	11,39	11,07	10,56	17,58	5,86	3,97	5,76	7,22	5,76	4,68
L+IL2-19	6,26	6,08	10,11	8,41	6,95	10,36	5,14	7,05	7,99	3,46	4,29	7,95
Lp+IL2-22	6,07	6,73	11,43	6,91	10,61	7,36	3,14	4,33	11,70	8,65	4,91	6,21
Lp+IL2-23	6,13	6,70	14,28	8,67	11,02	7,44	8,56	6,60	6,21	9,21	3,58	4,65
Lp+IL2-24	13,00	6,98	6,43	7,17	10,51	20,21	7,17	9,99	6,74	6,14	12,37	7,86

FIG. 32A

FIG. 32B

Depiction of overall disturbance



G vs O	Vb04-Jb1.1	Vb04-Jb1.2	Vb04-Jb1.3	Vb04-Jb1.4	Vb04-Jb1.5	Vb04-Jb1.6	Vb04-Jb2.1	Vb04-Jb2.2	Vb04-Jb2.3	Vb04-Jb2.4	Vb04-Jb2.5	Vb04-Jb2.7
CTR02	3,73	3,35	9,51	5,71	8,96	5,76	4,33	4,19	6,10	4,02	2,96	1,96
CTR03	5,05	5,44	7,60	4,39	13,10	12,42	3,57	6,04	2,08	5,17	3,25	2,75
CTR04	4,24	5,03	8,97	4,93	8,57	13,31	4,60	7,71	6,75	5,23	2,85	3,48
L07	7,27	22,44	7,35	9,59	1,42	25,67	2,02	4,68	10,05	9,54	28,46	4,47
L08	10,78	30,41	excluded	10,44	1,50	15,56	4,85	7,25	12,68	17,09	7,20	3,58
L09	12,27	27,12	7,48	17,32	3,72	24,45	3,68	3,84	7,26	20,56	10,74	3,83
Lp12	22,72	5,57	14,92	10,46	19,41	13,67	17,61	21,67	7,12	24,49	14,10	8,91
Lp13	5,10	7,79	17,83	7,33	10,92	5,70	5,83	8,22	8,25	18,99	5,89	5,81
Lp14	17,51	4,12	9,09	6,75	15,04	9,98	9,64	21,47	12,15	13,87	21,17	6,38
L+IL2-17	5,46	10,20	25,21	5,22	2,38	2,12	1,87	10,36	7,47	3,09	13,90	6,42
L+IL2-18	3,48	6,46	24,02	8,45	3,41	1,83	2,05	5,80	4,50	1,86	7,67	4,98
L+IL2-19	4,53	6,17	21,31	6,41	2,25	1,08	1,80	10,29	6,23	0,89	5,71	8,47
Lp+IL2-22	6,77	13,78	18,69	7,87	5,14	3,40	2,23	6,22	11,82	8,64	10,44	8,18
Lp+IL2-23	6,85	13,71	23,36	9,87	5,34	3,44	6,07	9,49	6,27	9,20	7,62	6,12
Lp+IL2-24	14,51	14,29	10,52	8,16	5,09	9,33	5,08	14,35	6,81	6,13	26,33	10,35

Parameters of file to use

	Workbook	Sheet	Group	Nature	Remark
1	EF/04 DF	Data.1	1	CTR02	CTR02
2	EF/05-07-009b DF	Data.3	1	CTR03	CTR03
3	EF/01-009b DF	Data.1	1	CTR04	CTR04
4	EF/02-07 DF	Data.1	2	L07	Lack 07
5	EF/04 DF	Data.5	2	L08	Lack 08
6	EF/05-07-009b DF	Data.5	2	L09	Lack 09
7	EF/04 DF	Data.3	3	Lp12	Lackp12
8	EF/05-07-009b DF	Data.1	3	Lp13	Lackp13
9	EF/01-009b DF	Data.5	3	Lp14	Lackp14
10	EF/03 DF	Data.1	4	L+IL2-17	Lack+IL2-17
11	EF/03 DF	Data.5	4	L+IL2-18	Lack+IL2-18
12	EF/02-07 DF	Data.3	4	L+IL2-19	Lack+IL2-19
13	EF/01-009b DF	Data.3	5	Lp+IL2-22	Lackp+IL2-22
14	EF/02-07 DF	Data.5	5	Lp+IL2-23	Lackp+IL2-23
15	EF/03 DF	Data.3	5	Lp+IL2-24	Lackp+IL2-24

DrawArray parameters

when <	color
excluded	
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10	
20	
25	
30	
50	
100	

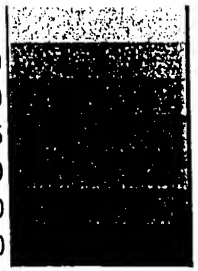
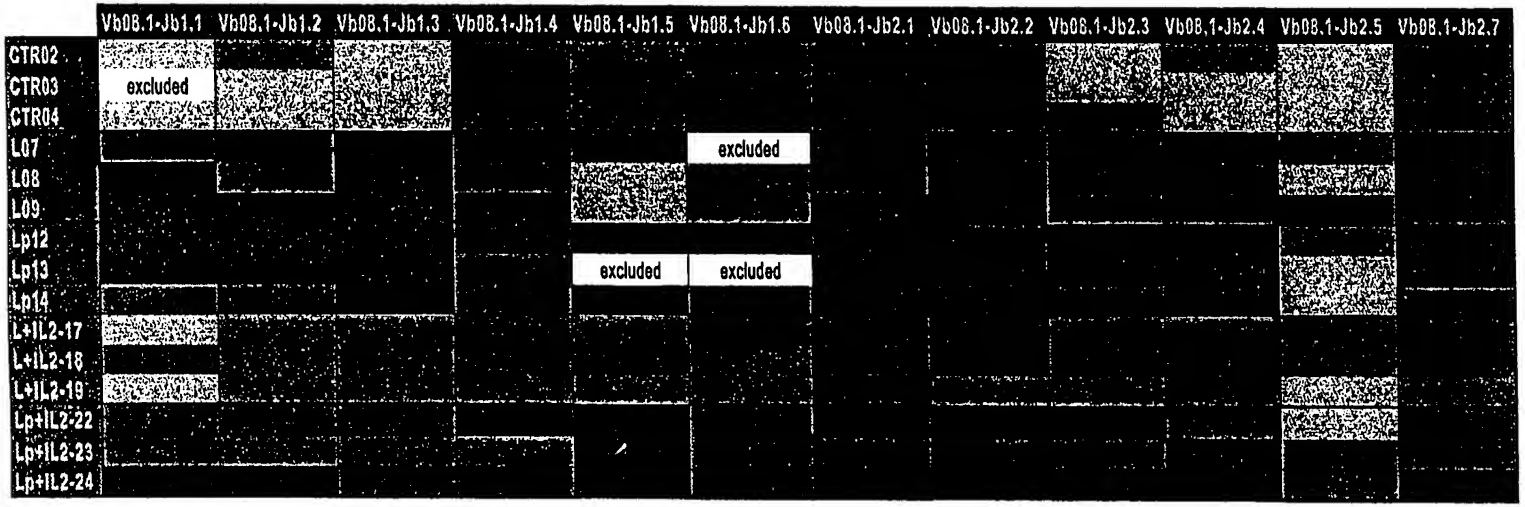
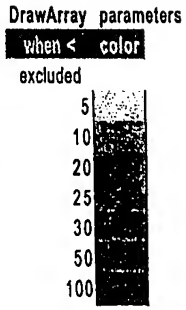


FIG. 33

Depiction of overall disturbance versus oligocionality

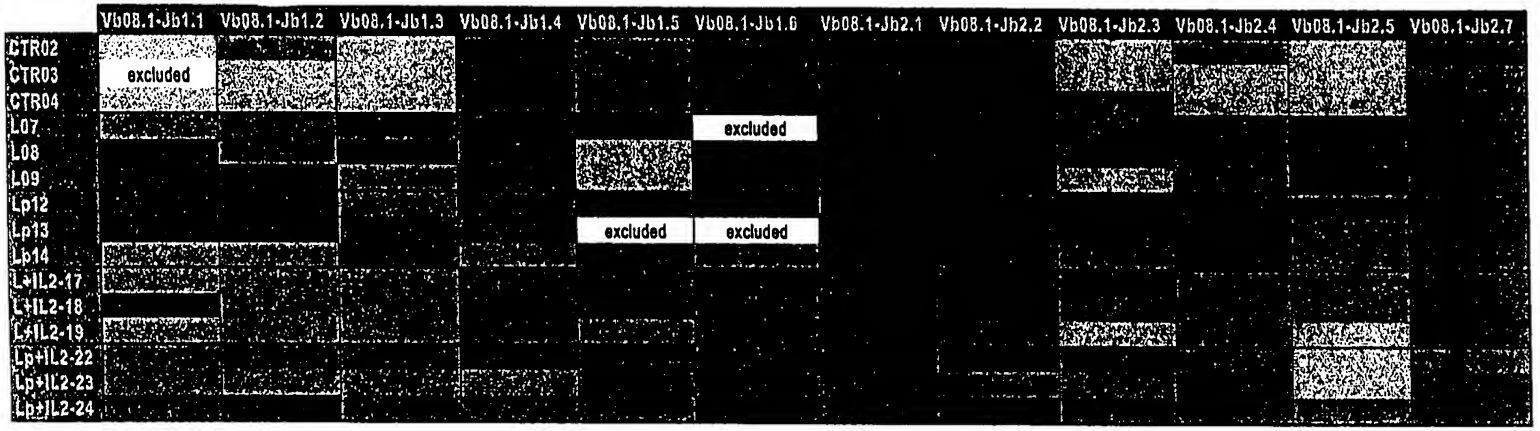


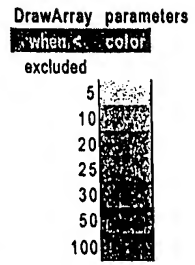


G vs O	Vb08.1-Jb1.1	Vb08.1-Jb1.2	Vb08.1-Jb1.3	Vb08.1-Jb1.4	Vb08.1-Jb1.5	Vb08.1-Jb1.6	Vb08.1-Jb2.1	Vb08.1-Jb2.2	Vb08.1-Jb2.3	Vb08.1-Jb2.4	Vb08.1-Jb2.5	Vb08.1-Jb2.7
CTR02	2,49	5,75	4,01	21,84	9,47	16,95	18,35	21,10	2,76	5,11	1,30	18,64
CTR03	excluded	3,76	3,41	11,84	7,37	9,78	7,25	10,08	3,13	2,55	2,27	8,25
CTR04	2,49	3,00	3,49	10,16	5,09	10,88	12,22	13,96	5,11	3,01	2,53	10,39
L07	11,64	13,54	198,47	26,06	15,13	excluded	18,09	41,06	23,02	26,73	6,37	31,15
L08	60,87	7,74	473,38	18,07	3,40	8,34	13,95	67,80	18,05	20,17	4,46	31,42
L09	56,20	50,36	107,34	31,84	4,03	8,99	34,03	70,06	6,95	19,73	15,84	32,53
Lp12	108,52	142,53	53,35	35,14	228,92	55,58	42,17	46,99	63,95	70,99	6,87	58,16
Lp13	106,04	132,21	102,21	27,16	excluded	excluded	40,76	45,98	59,82	80,47	3,84	58,47
Lp14	24,72	32,72	87,05	14,65	178,64	13,97	30,58	37,48	37,23	79,48	3,74	29,63
L+IL2-17	3,89	6,05	9,66	11,06	13,98	15,06	26,99	30,82	24,36	20,31	7,35	10,13
L+IL2-18	20,28	8,72	6,73	15,95	17,90	9,50	24,46	31,94	12,75	19,10	6,77	10,93
L+IL2-19	3,31	5,34	7,32	10,06	5,56	6,42	28,90	12,47	8,55	17,19	4,25	7,48
Lp+IL2-22	15,70	12,00	21,35	30,56	61,97	15,66	34,82	140,07	69,78	46,88	4,68	16,60
Lp+IL2-23	15,71	9,90	8,18	8,65	58,36	12,06	27,40	46,58	31,48	63,35	6,10	22,45
Lp+IL2-24	42,18	38,47	20,77	23,73	94,32	25,80	36,41	121,37	50,29	97,02	8,08	35,37

FIG. 34A

Depiction of overall disturbance





	Vb08.1-Jb1.1	Vb08.1-Jb1.2	Vb08.1-Jb1.3	Vb08.1-Jb1.4	Vb08.1-Jb1.5	Vb08.1-Jb1.6	Vb08.1-Jb2.1	Vb08.1-Jb2.2	Vb08.1-Jb2.3	Vb08.1-Jb2.4	Vb08.1-Jb2.5	Vb08.1-Jb2.7
CTR02	2,49	5,75	4,01	21,84	9,47	16,95	18,35	21,10	2,76	5,11	1,30	18,64
CTR03	excluded	3,76	3,41	11,84	7,37	9,78	7,25	10,08	3,13	2,55	2,27	8,25
CTR04	2,49	3,00	3,49	10,16	5,09	10,88	12,22	13,96	5,11	3,01	2,53	10,39
L07	6,38	9,32	17,25	19,35	13,65	excluded	13,14	15,25	8,76	9,77	14,96	20,52
L08	33,37	5,33	41,13	13,42	3,07	24,22	10,14	25,18	6,87	7,37	10,47	20,69
L09	30,81	34,66	9,33	23,64	3,63	26,11	24,72	26,01	2,65	7,21	37,21	21,43
Lp12	30,91	38,86	7,12	23,50	26,22	34,24	19,56	24,51	10,96	14,76	10,78	23,97
Lp13	30,21	36,04	13,64	18,17	excluded	excluded	18,91	23,98	10,26	16,72	6,03	24,10
Lp14	7,04	8,92	11,61	9,80	20,46	8,61	14,18	19,54	6,38	16,52	5,87	12,21
L+IL2-17	6,04	5,67	7,85	15,08	19,64	29,55	15,64	24,95	13,35	7,08	8,57	13,69
L+IL2-18	31,47	8,17	5,47	21,74	25,15	18,64	14,18	25,86	6,99	6,66	7,90	14,77
L+IL2-19	5,14	5,01	5,95	13,72	7,81	12,60	16,75	10,09	4,69	5,99	4,96	10,10
Lp+IL2-22	10,08	10,10	13,58	28,46	12,82	15,46	22,39	35,87	14,54	9,29	3,42	8,33
Lp+IL2-23	10,08	8,33	5,20	8,05	12,07	11,90	17,61	11,93	6,56	12,55	4,46	11,27
Lp+IL2-24	27,07	32,38	13,20	22,10	19,51	25,47	23,41	31,08	10,48	19,22	5,90	17,75

FIG. 34B

Parameters of file to use

	Workbook	Sheet	Group	Nature	Remark
1	EF/04 DF	Data.2	1	CTR02	CTR02
2	EF/05-07-009b DF	Data.4	1	CTR03	CTR03
3	EF/01-009b DF	Data.2	1	CTR04	CTR04
4	EF/02-07 DF	Data.2	2	L07	Lack 07
5	EF/04 DF	Data.6	2	L08	Lack 08
6	EF/05-07-009b DF	Data.6	2	L09	Lack 09
7	EF/04 DF	Data.4	3	Lp12	Lackp12
8	EF/05-07-009b DF	Data.2	3	Lp13	Lackp13
9	EF/01-009b DF	Data.6	3	Lp14	Lackp14
10	EF/03 DF	Data.2	4	L+IL2-17	Lack+IL2-17
11	EF/03 DF	Data.6	4	L+IL2-18	Lack+IL2-18
12	EF/02-07 DF	Data.4	4	L+IL2-19	Lack+IL2-19
13	EF/01-009b DF	Data.4	5	Lp+IL2-22	Lackp+IL2-22
14	EF/02-07 DF	Data.6	5	Lp+IL2-23	Lackp+IL2-23
15	EF/03 DF	Data.4	5	Lp+IL2-24	Lackp+IL2-24

DrawArray parameters

when <	color
excluded	
5	
10	
20	
25	
30	
50	
100	

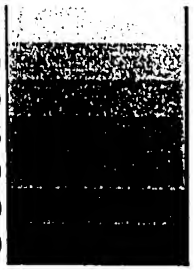


FIG. 35

Parameters of file to use		DA PWK/R-CD4+			
	Workbook	Sheet	Group	Nature	Remark
1	DF BB/013	Data.3	1	RJ0a	1
2	DF BB/013	Data.1	1	RJ0b	2
3	DF BB/013	Data.2	1	RJ0c	3
4	DF BB/014	Data.1	1	RJ0d	4
5	DF BB/017	Data.1	1	RJ0e	5
6	DF BB/017	Data.2	1	RJ0f	6
7	DF BB/005	Data.1	2	R7sa	7
8	DF BB/005	Data.2	2	R7sb	8
9	DF BB/005	Data.3	2	R7sc	9
10	DF BB/006	Data.2	2	R7sd	10
11	DF BB/006	Data.2	2	R7se	11
12	DF BB/006	Data.3	2	R7sf	12
13	DF BB/023	Data.1	3	R20sa	13
14	DF BB/023	Data.2	3	R20sb	14
15	DF BB/023	Data.3	3	R20sc	15
16	DF BB/024	Data.1	3	R20sd	16
17	DF BB/024	Data.2	3	R20se	17
18	DF BB/024	Data.3	3	R20sf	18
19	DF BB/031	Data.1	4	R27sa	19
20	DF BB/031	Data.2	4	R27sb	20
21	DF BB/031	Data.3	4	R27sc	21
22	DF BB/032	Data.1	4	R27sd	22
23	DF BB/032	Data.2	4	R27se	23
24	DF BB/032	Data.3	4	R27sf	24

FIG. 36

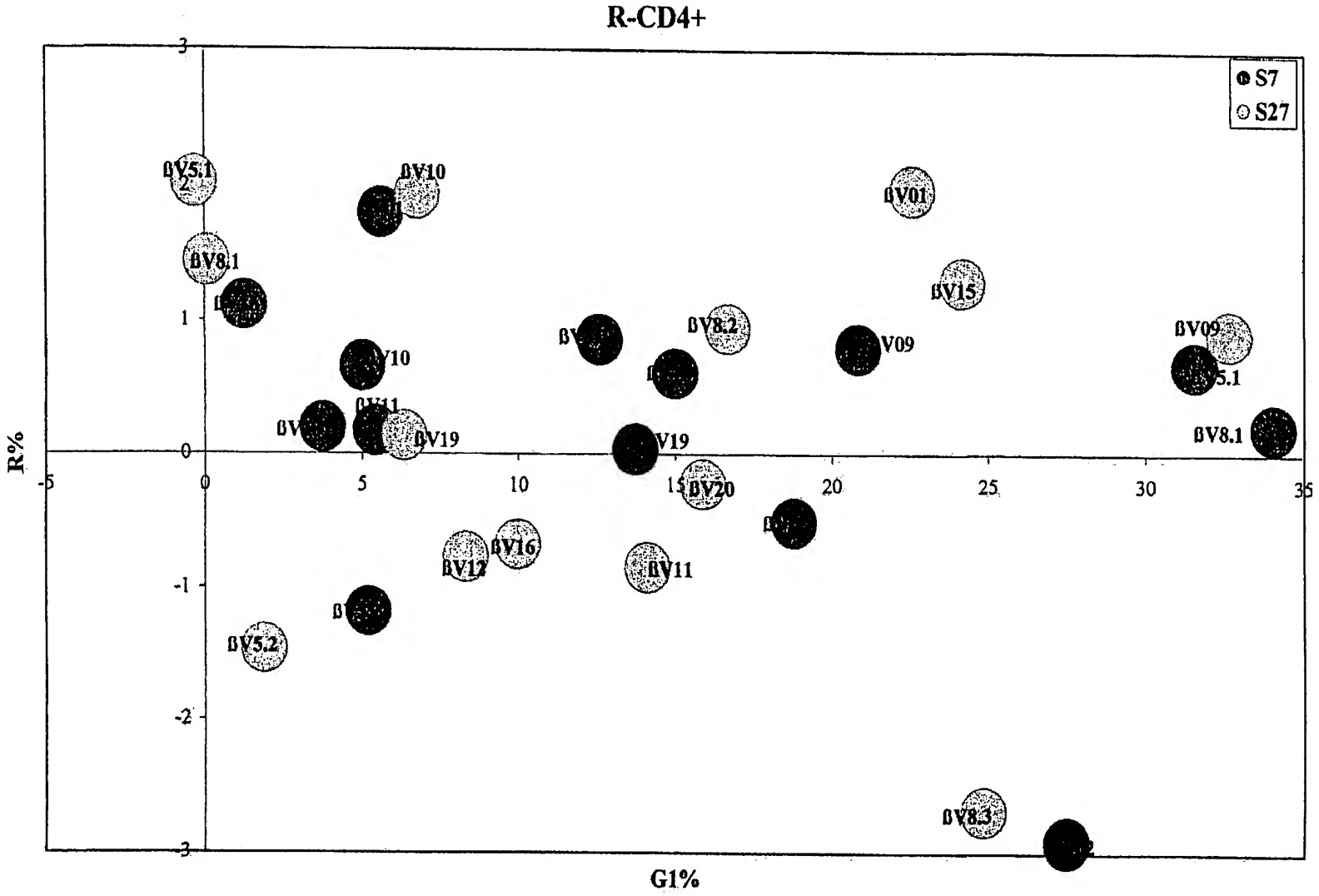

R-CD4+
S7
S27
BV5.1
BV10
BV01
BV8.1
BV15
BV8.2
BV09
BV11
BV19
BV20
BV16
BV12
BV5.2
BV8.3
R%
G1%
3
2
1
0
-1
-2
-3
-5
0
5
10
15
20
25
30
35

FIG. 37

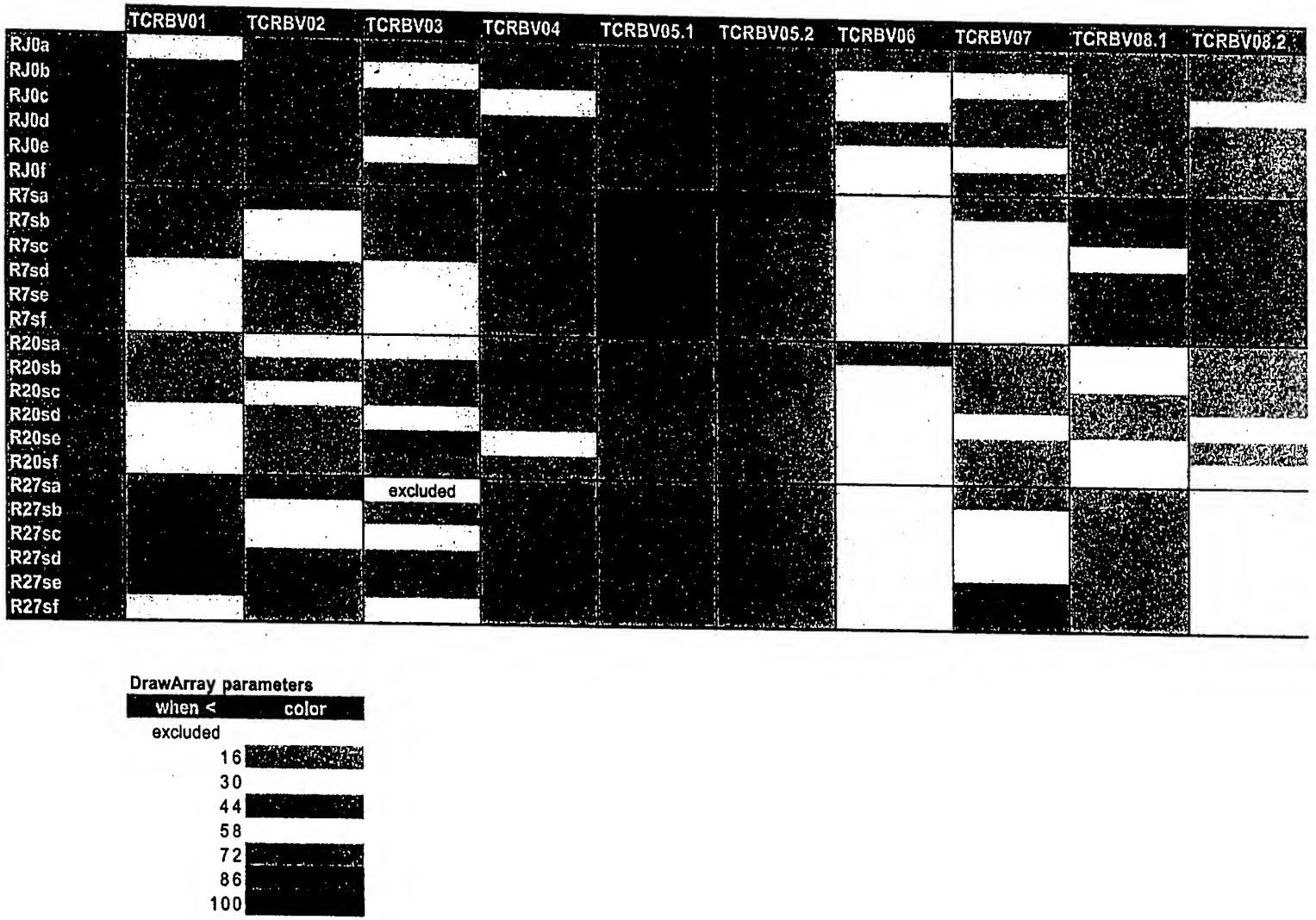

TCRBV01
TCRBV02
TCRBV03
TCRBV04
TCRBV05.1
TCRBV05.2
TCRBV06
TCRBV07
TCRBV08.1
TCRBV08.2
RJ0a
RJ0b
RJ0c
RJ0d
RJ0e
RJ0f
R7sa
R7sb
R7sc
R7sd
R7se
R7sf
R20sa
R20sb
R20sc
R20sd
R20se
R20sf
R27sa
R27sb
R27sc
R27sd
R27se
R27sf
excluded
DrawArray parameters
when <
color
excluded
16
30
44
58
72
86
100

FIG. 38A

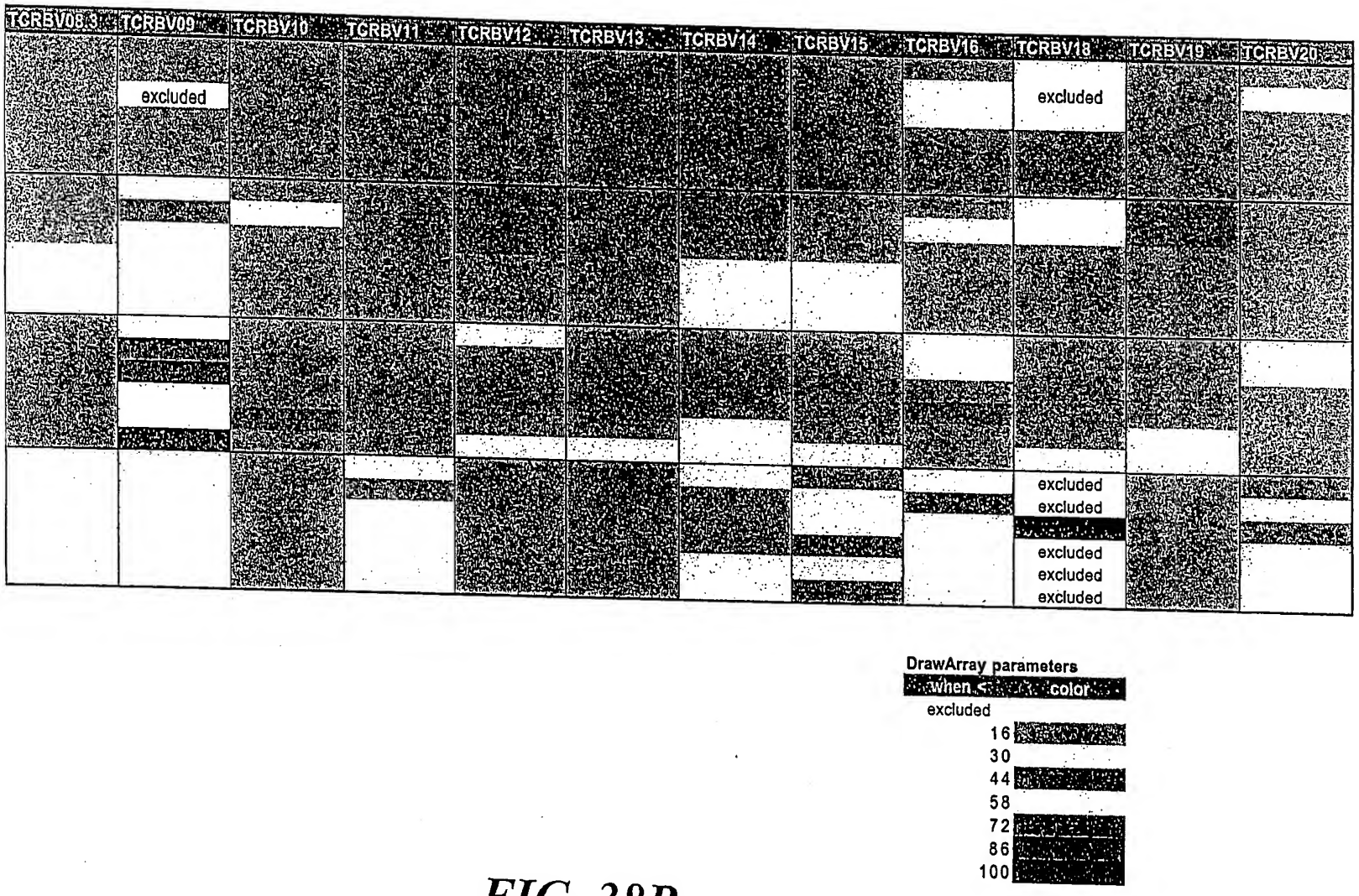

TCRBV08 3
TCRBV09
TCRBV10
TCRBV11
TCRBV12
TCRBV13
TCRBV14
TCRBV15
TCRBV16
TCRBV18
TCRBV19
TCRBV20
excluded
excluded
excluded
excluded
excluded
excluded
excluded
DrawArray parameters
when
color
excluded
16
30
44
58
72
86
100

FIG. 38B

Score d'Oligoclonalité βV : PWK/Rate-CD4$^+$	
7 semaines post-infection	**27 semaines post-infection**
βV01 (9-10-11 aa)	βV5.2 (9 aa)
βV09 (10-11 aa)	βV8.3 (8-9-10 aa)
βV16 (10 aa)	βV09 (7-9-10-12-13 aa)
βV19 (12 aa)	βV10 (9 aa)
	βV11 (9-10-11 aa)

FIG.39

Score d'Oligoclonalité βV : PWK/GG-CD4$^+$	
7 semaines post-infection	**27 semaines post-infection**
βV01 (9-10-11 aa)	βV5.2 (8-9 aa)
βV03 (10 aa)	βV10 (9 aa)
βV8.1 (10 aa)	βV14 (10 aa)
βV8.2 (9-10-11 aa)	βV15 (9-10-11 aa)
βV09 (9-10-11 aa)	
βV16 (10 aa)	
βV19 (10-12 aa)	

FIG.44

Score d'Oligoclonalité βV : PWK/GG-CD8$^+$	
7 semaines post-infection	**27 semaines post-infection**
βV12 (9-10 aa)	βV03 (10 aa)
βV15 (8-9 aa)	βV04 (11 aa)

FIG. 49

Score d'Oligoclonalité βV : PWK/Rate-CD8$^+$	
7 semaines post-infection	**27 semaines post-infection**
βV01 (10-11-12 aa)	βV03 (10 aa)
	βV13 (11 aa)

FIG. 54

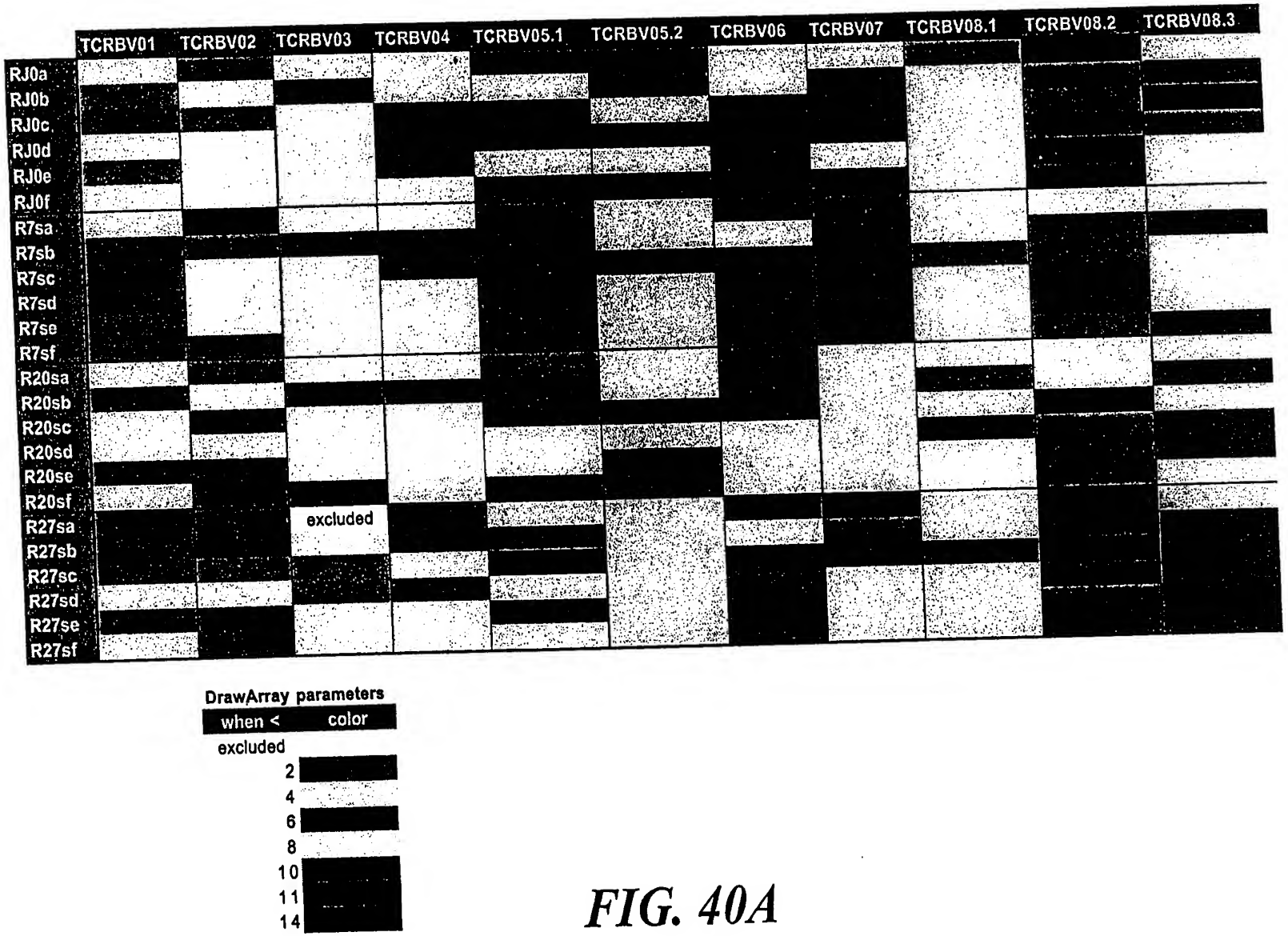

TCRBV01
TCRBV02
TCRBV03
TCRBV04
TCRBV05.1
TCRBV05.2
TCRBV06
TCRBV07
TCRBV08.1
TCRBV08.2
TCRBV08.3
RJ0a
RJ0b
RJ0c
RJ0d
RJ0e
RJ0f
R7sa
R7sb
R7sc
R7sd
R7se
R7sf
R20sa
R20sb
R20sc
R20sd
R20se
R20sf
R27sa
R27sb
R27sc
R27sd
R27se
R27sf
excluded
DrawArray parameters
when <
color
excluded
2
4
6
8
10
11
14

FIG. 40A

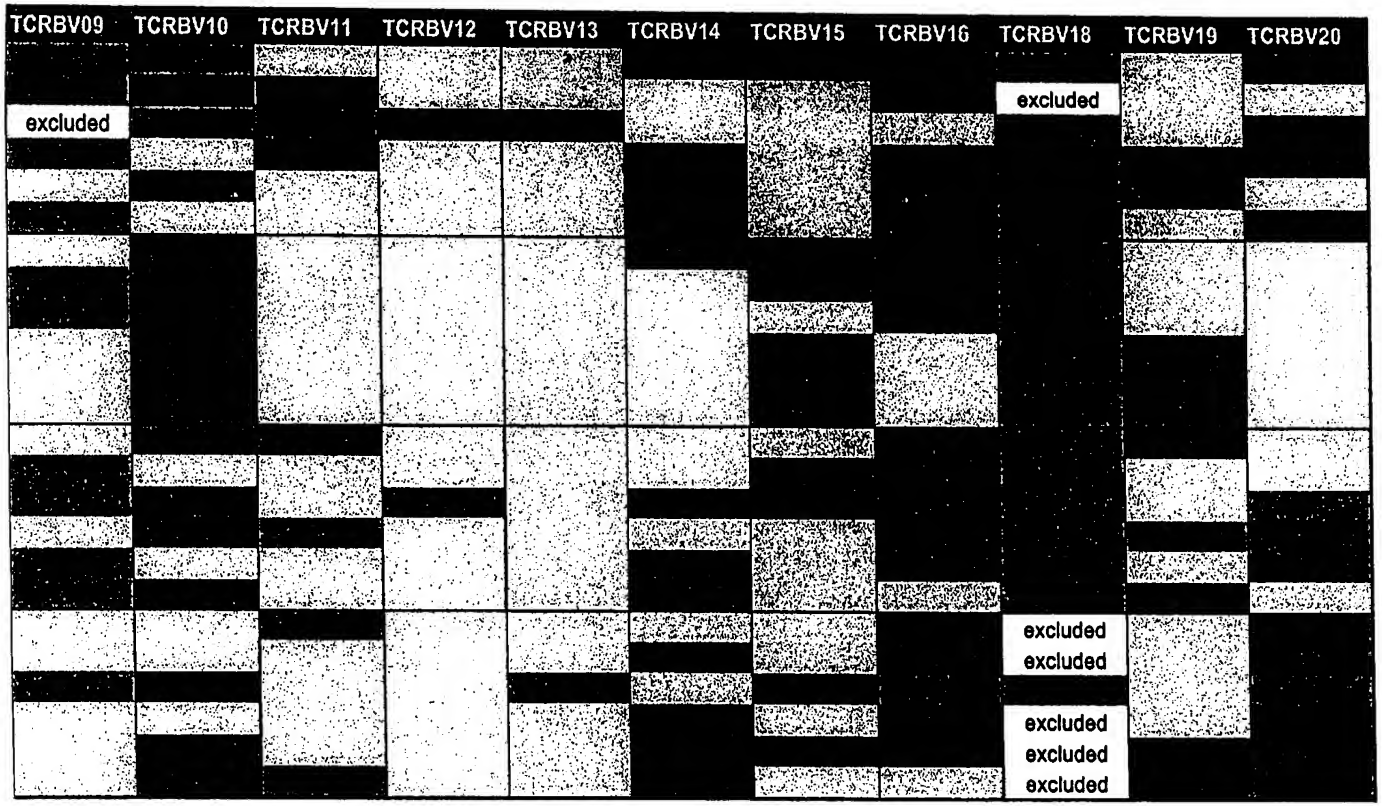

TCRBV09
TCRBV10
TCRBV11
TCRBV12
TCRBV13
TCRBV14
TCRBV15
TCRBV16
TCRBV18
TCRBV19
TCRBV20
excluded
excluded
excluded
excluded
excluded
excluded
excluded
DrawArray parameters
when <
color
excluded
2
4
6
8
10
11
14

FIG. 40B

Parameters of file to use		DA PWK/GG-CD4+			
	Workbook	Sheet	Group	Nature	Remark
1	DF BB/009	Data.2	1	GGJ0b	1
2	DF BB/009	Data.3	1	GGJ0c	2
3	DF BB/009	Data.1	1	GGJ0a	3
4	DF BB/010	Data.1	1	GGJ0d	4
5	DF BB/010	Data.2	1	GGJ0e	5
6	DF BB/010	Data.3	1	GGJ0f	6
7	DF BB/002	Data.1	2	GG7sa	7
8	DF BB/002	Data.2	2	GG7sb	8
9	DF BB/002	Data.3	2	GG7sc	9
10	DF BB/003	Data.1	2	GG7sd	10
11	DF BB/003	Data.2	2	GG7se	11
12	DF BB/007	Data.3	2	GG7sf	12
13	DF BB/019	Data.1	3	GG20sa	13
14	DF BB/019	Data.2	3	GG20sb	14
15	DF BB/019	Data.3	3	GG20sc	15
16	DF BB/020	Data.1	3	GG20sd	16
17	DF BB/020	Data.2	3	GG20se	17
18	DF BB/020	Data.3	3	GG20sf	18
19	DF BB/027	Data.1	4	GG27sa	19
20	DF BB/027	Data.2	4	GG27sb	20
21	DF BB/027	Data.3	4	GG27sc	21
22	DF BB/028	Data.1	4	GG27sd	22
23	DF BB/028	Data.2	4	GG27se	23
24	DF BB/028	Data.3	4	GG27sf	24

FIG. 41

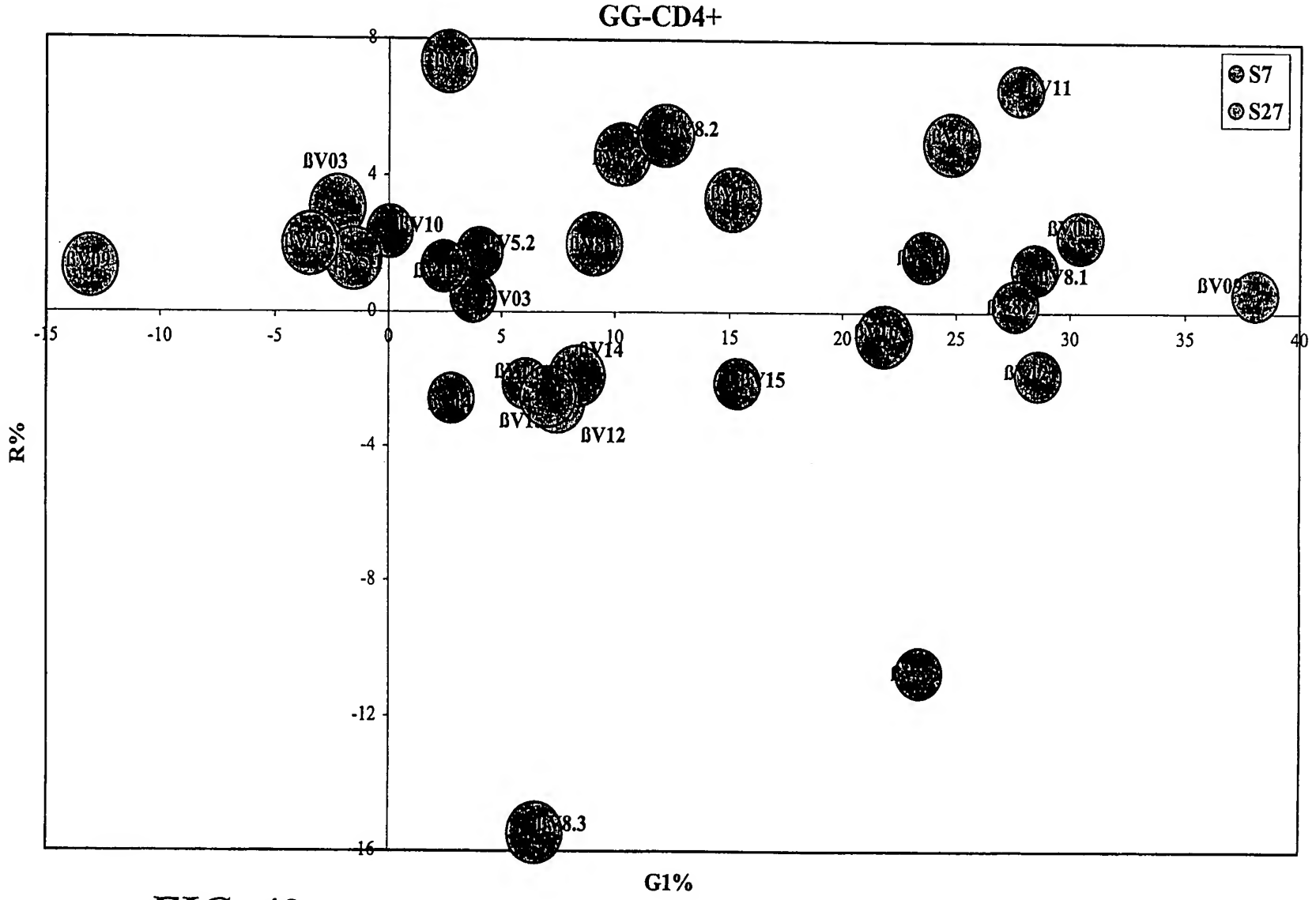

GG-CD4+
S7
S27
ßV03
ßV10
ßV5.2
ßV03
ßV14
ßV15
ßV12
ßV11
ßV8.1
ßV05
ßV8.3
R%
G1%
8
4
0
-4
-8
-12
-16
-15
-10
-5
0
5
10
15
20
25
30
35
40

FIG. 42

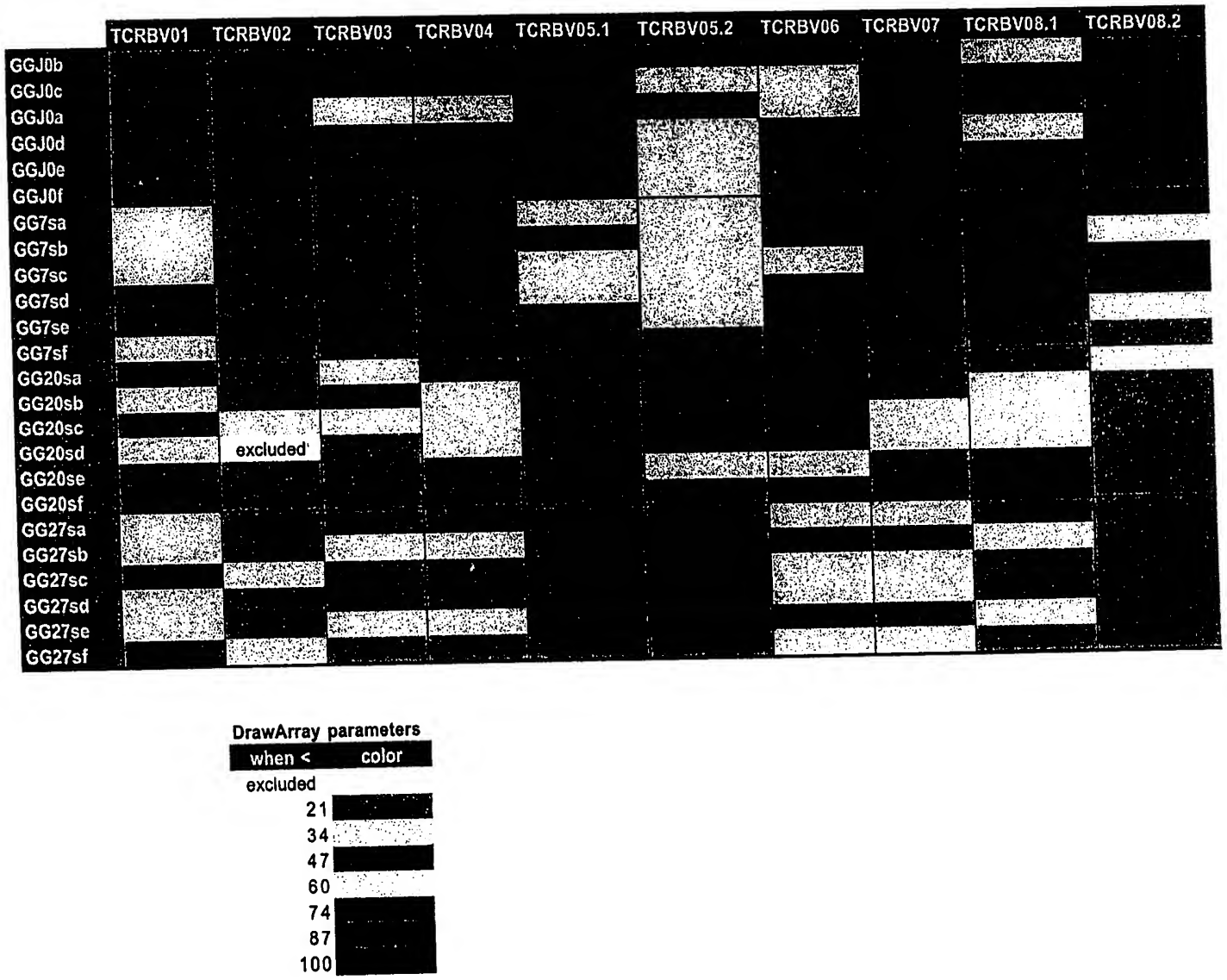

TCRBV01
TCRBV02
TCRBV03
TCRBV04
TCRBV05.1
TCRBV05.2
TCRBV06
TCRBV07
TCRBV08.1
TCRBV08.2
GGJ0b
GGJ0c
GGJ0a
GGJ0d
GGJ0e
GGJ0f
GG7sa
GG7sb
GG7sc
GG7sd
GG7se
GG7sf
GG20sa
GG20sb
GG20sc
GG20sd
GG20se
GG20sf
GG27sa
GG27sb
GG27sc
GG27sd
GG27se
GG27sf
excluded
DrawArray parameters
when < color
excluded
21
34
47
60
74
87
100

FIG. 43A

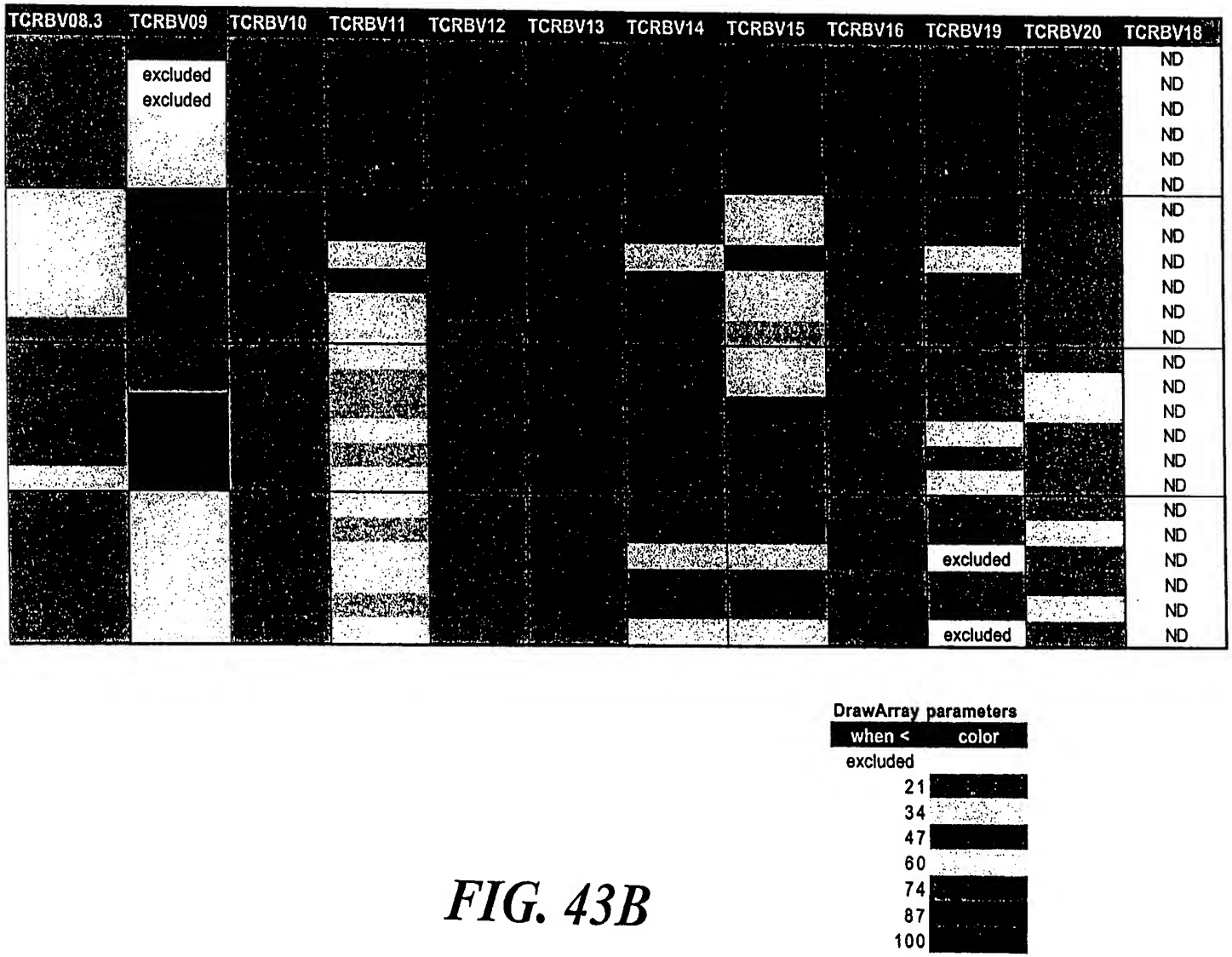

TCRBV08.3
TCRBV09
TCRBV10
TCRBV11
TCRBV12
TCRBV13
TCRBV14
TCRBV15
TCRBV16
TCRBV19
TCRBV20
TCRBV18
excluded
excluded
excluded
excluded
ND
DrawArray parameters
when <
color
excluded
21
34
47
60
74
87
100

FIG. 43B

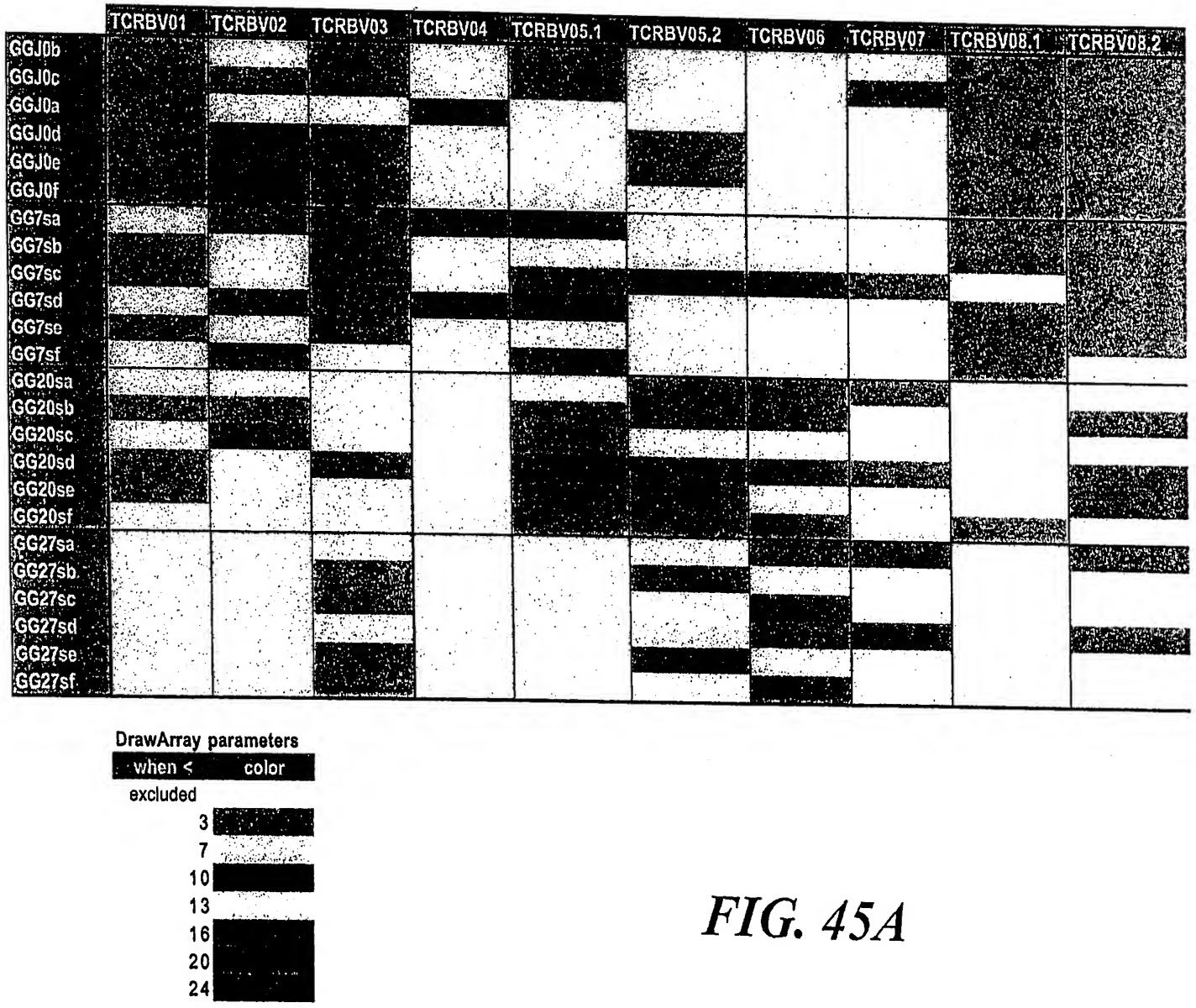

TCRBV01
TCRBV02
TCRBV03
TCRBV04
TCRBV05.1
TCRBV05.2
TCRBV06
TCRBV07
TCRBV08.1
TCRBV08.2
GGJ0b
GGJ0c
GGJ0a
GGJ0d
GGJ0e
GGJ0f
GG7sa
GG7sb
GG7sc
GG7sd
GG7se
GG7sf
GG20sa
GG20sb
GG20sc
GG20sd
GG20se
GG20sf
GG27sa
GG27sb
GG27sc
GG27sd
GG27se
GG27sf
DrawArray parameters
when ≤
color
excluded
3
7
10
13
16
20
24

FIG. 45A

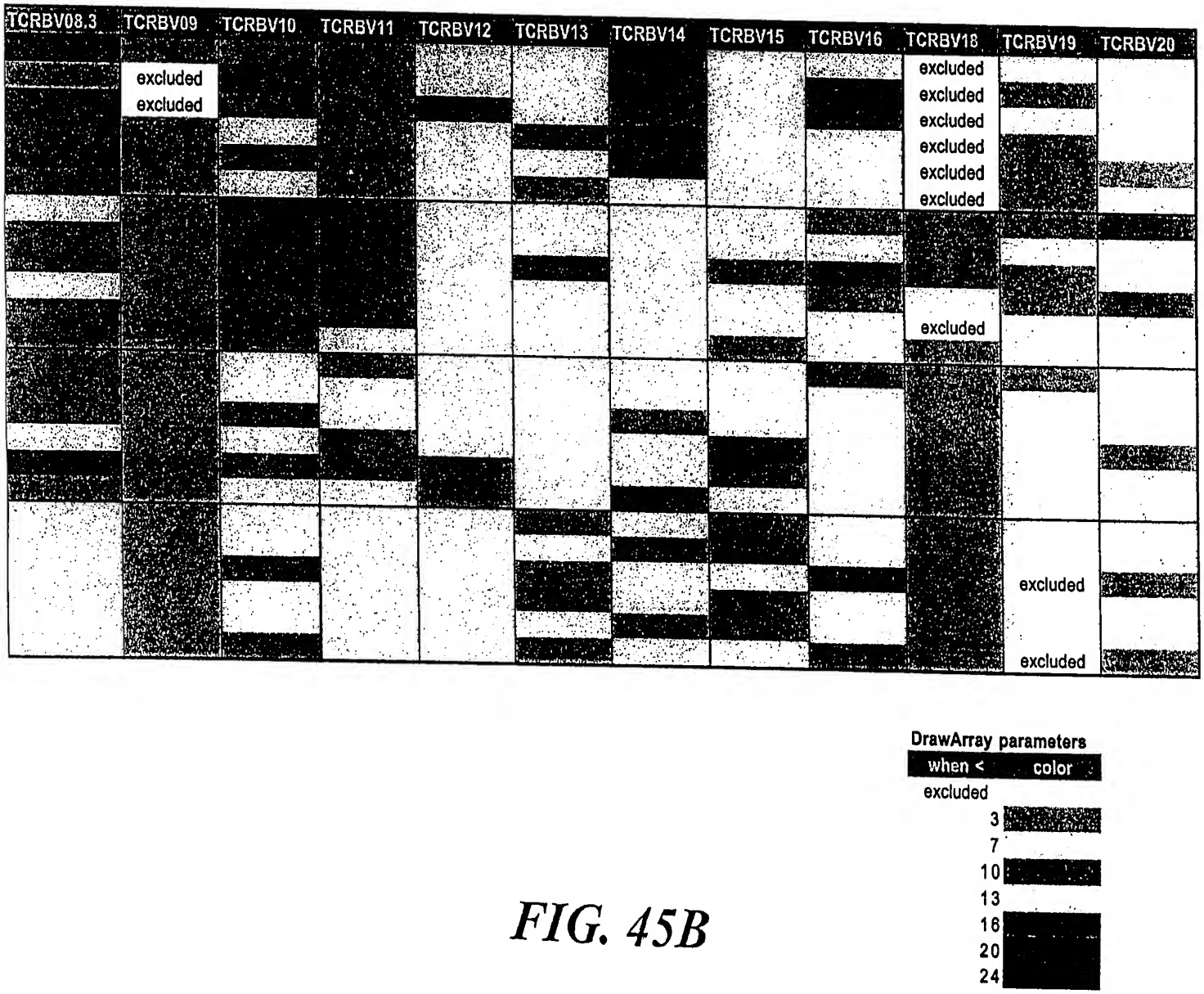

TCRBV08.3
TCRBV09
TCRBV10
TCRBV11
TCRBV12
TCRBV13
TCRBV14
TCRBV15
TCRBV16
TCRBV18
TCRBV19
TCRBV20
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
DrawArray parameters
when <
color
excluded
3
7
10
13
16
20
24

FIG. 45B

Parameters of file to use		DA PWK/GG-CD8+			
	Workbook	Sheet	Group	Nature	Remark
1	DF BB/001	Data.2	2	GG7sb	7
2	DF BB/001	Data.1	2	GG7sa	8
3	DF BB/001	Data.3	2	GG7sc	9
4	DF BB/004	Data.1	2	GG7sd	10
5	DF BB/004	Data.2	2	GG7se	11
6	DF BB/004	Data.3	2	GG7sf	12
7	DF BB/011	Data.1	1	GGJOa	1
8	DF BB/011	Data.2	1	GGJOb	2
9	DF BB/011	Data.3	1	GGJOc	3
10	DF BB/012	Data.1	1	GGJOd	4
11	DF BB/012	Data.2	1	GGJOe	5
12	DF BB/012	Data.3	1	GGJOf	6
13	DF BB/021	Data.1	3	GG20sa	13
14	DF BB/021	Data.2	3	GG20sb	14
15	DF BB/021	Data.3	3	GG20sc	15
16	DF BB/022	Data.1	3	GG20sd	16
17	DF BB/022	Data.2	3	GG20se	17
18	DF BB/022	Data.3	3	GG20sf	18
19	DF BB/029	Data.1	4	GG27sa	19
20	DF BB/029	Data.2	4	GG27sb	20
21	DF BB/029	Data.3	4	GG27sc	21
22	DF BB/030	Data.1	4	GG27sd	22
23	DF BB/030	Data.2	4	GG27se	23
24	DF BB/030	Data.3	4	GG27sf	24

FIG. 46

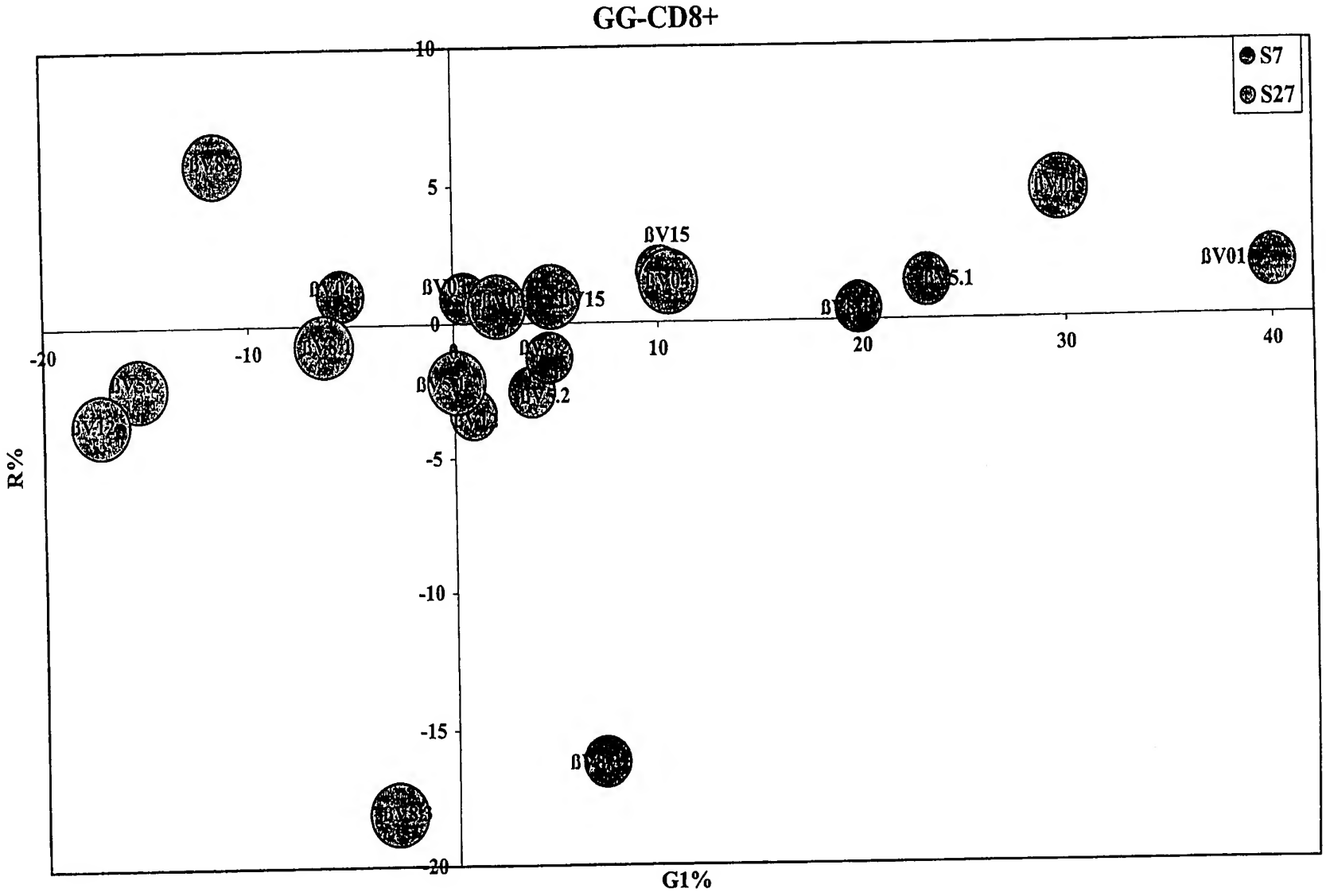

GG-CD8+
S7
S27
BV15
BV01
BV05
BV15
BV5.2
BV5.1
R%
G1%
10
5
0
-5
-10
-15
-20
-20
-10
10
20
30
40

FIG. 47

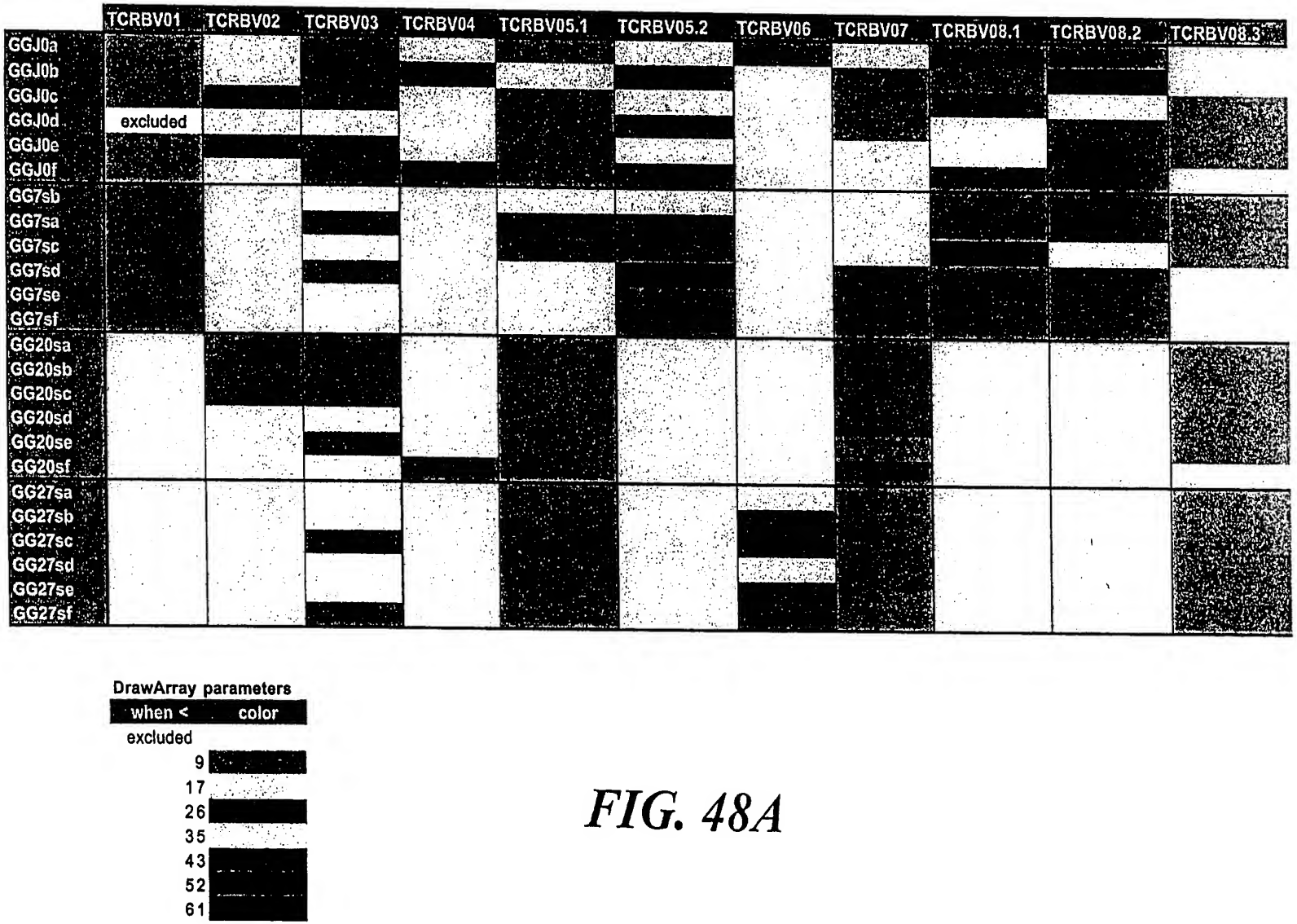

TCRBV01
TCRBV02
TCRBV03
TCRBV04
TCRBV05.1
TCRBV05.2
TCRBV06
TCRBV07
TCRBV08.1
TCRBV08.2
TCRBV08.3
GGJ0a
GGJ0b
GGJ0c
GGJ0d
GGJ0e
GGJ0f
excluded
GG7sb
GG7sa
GG7sc
GG7sd
GG7se
GG7sf
GG20sa
GG20sb
GG20sc
GG20sd
GG20se
GG20sf
GG27sa
GG27sb
GG27sc
GG27sd
GG27se
GG27sf
DrawArray parameters
when <
color
excluded
9
17
26
35
43
52
61

FIG. 48A

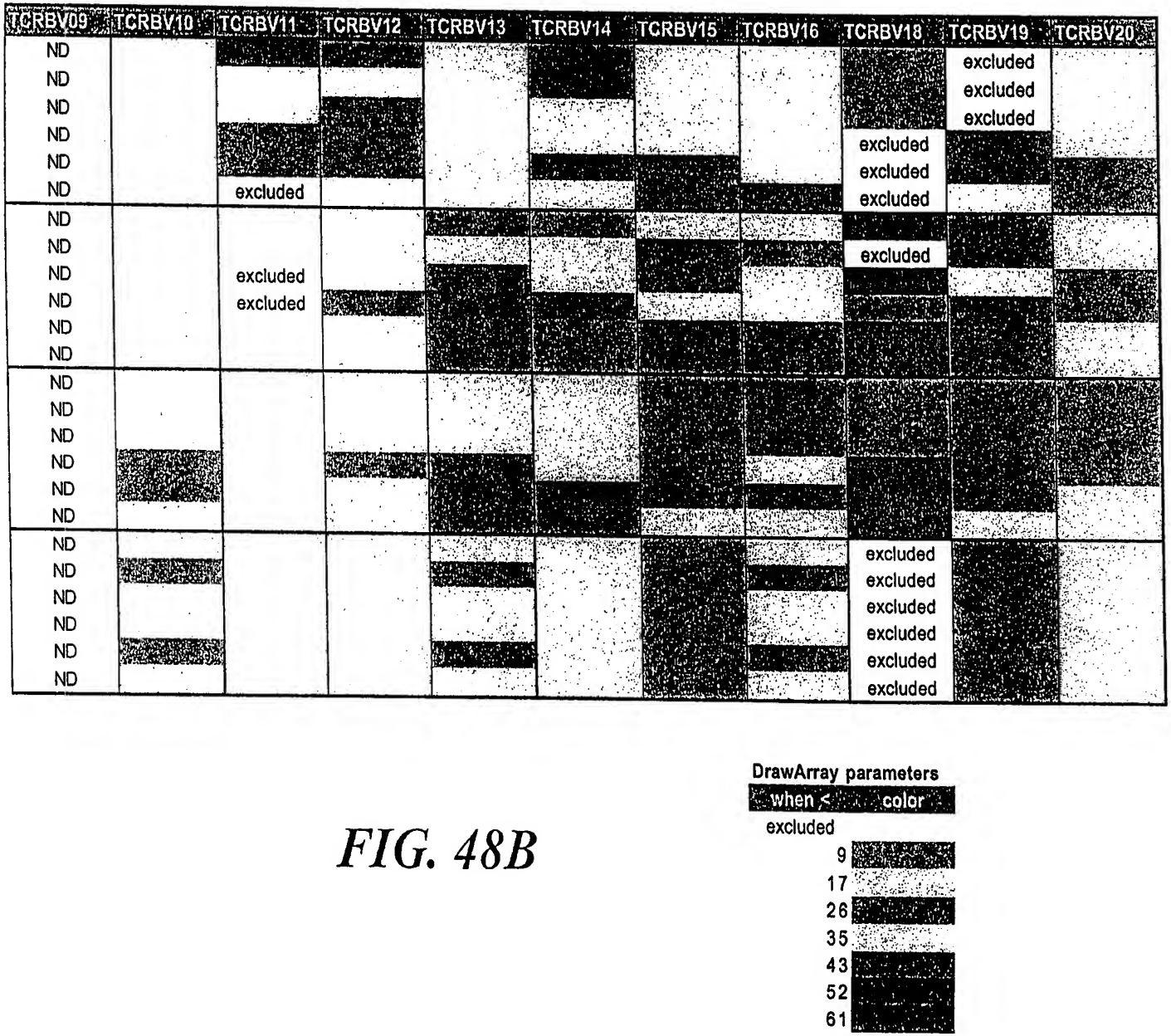

TCRBV09
TCRBV10
TCRBV11
TCRBV12
TCRBV13
TCRBV14
TCRBV15
TCRBV16
TCRBV18
TCRBV19
TCRBV20
ND
excluded
DrawArray parameters
when <
color
9
17
26
35
43
52
61

FIG. 48B

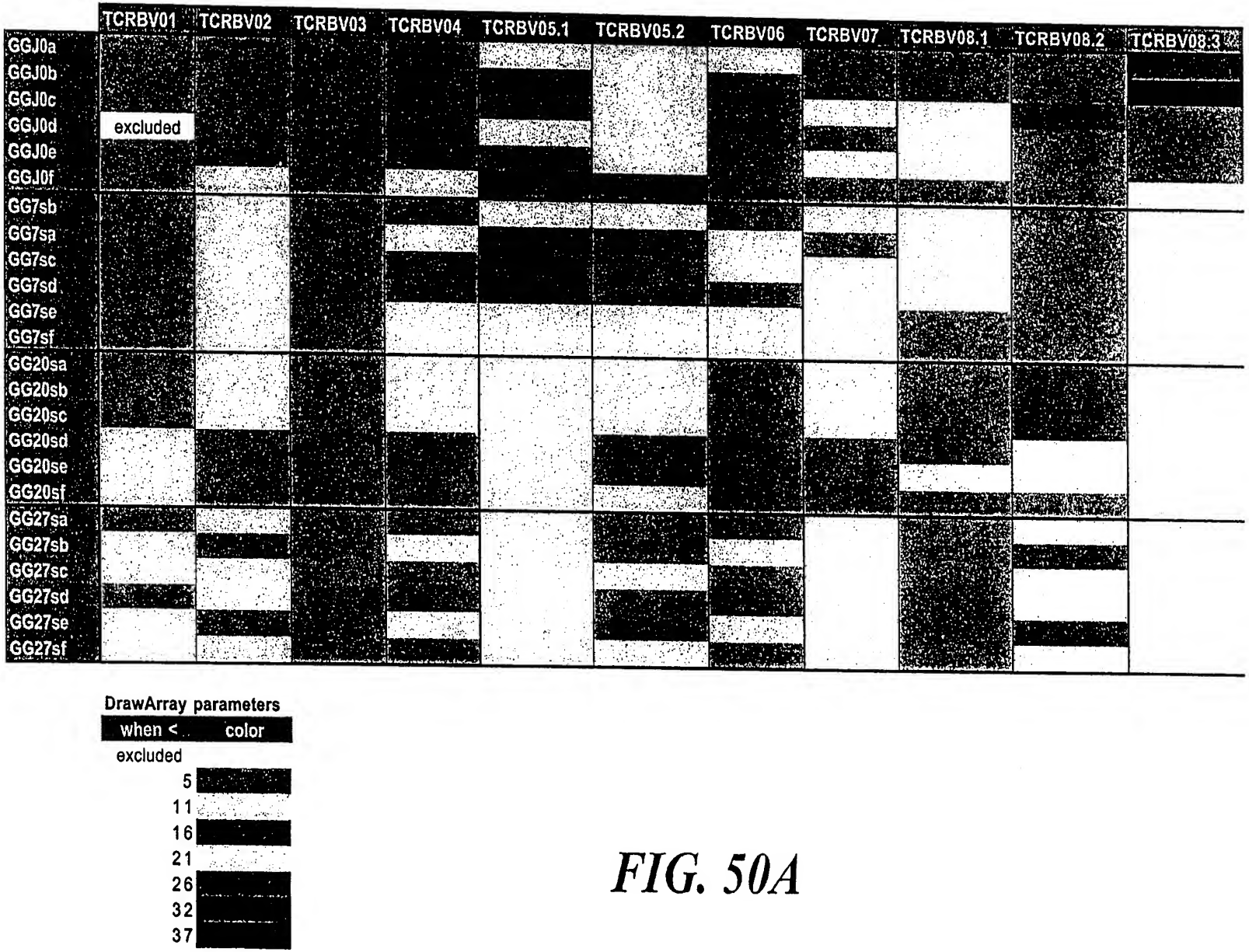
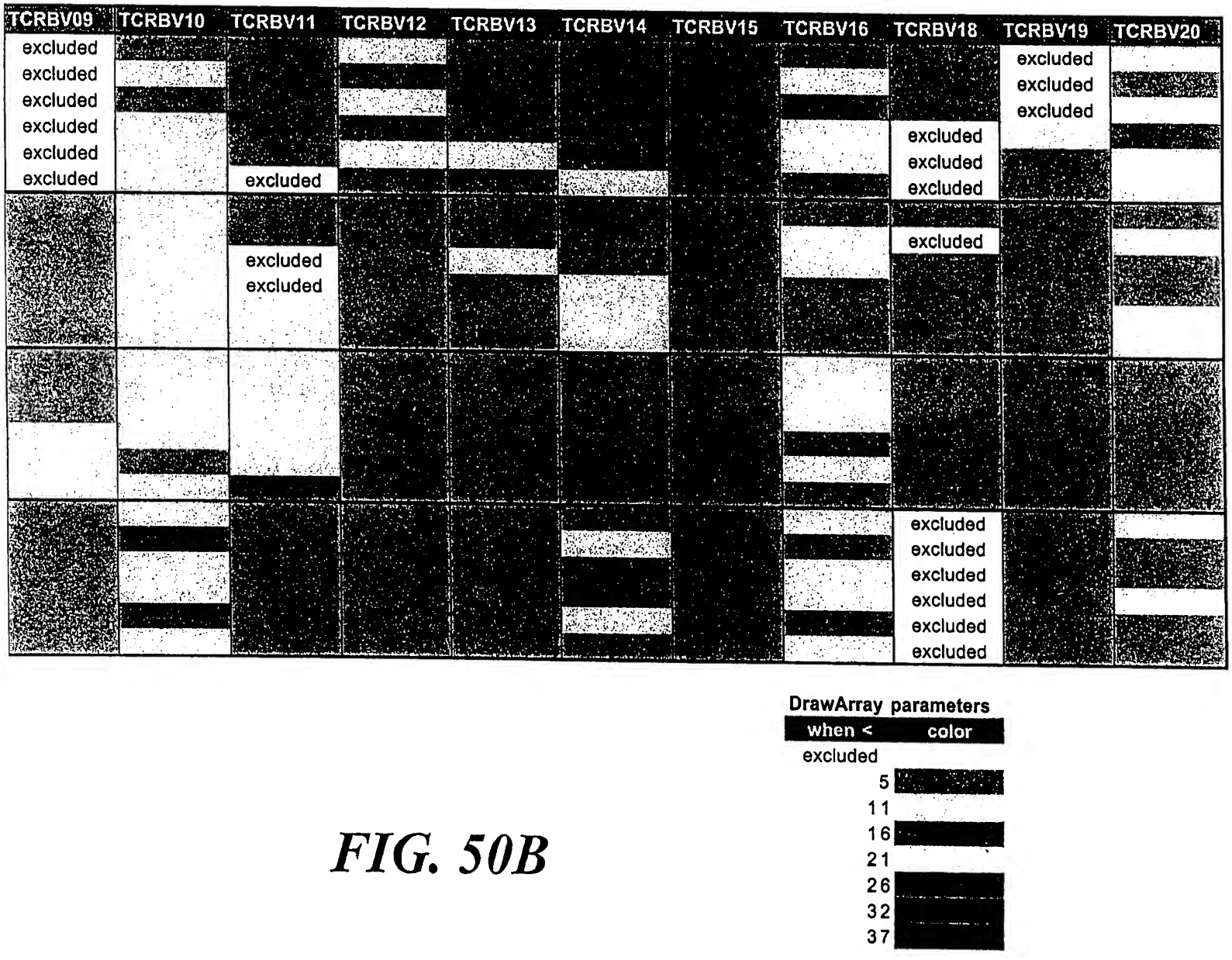

TCRBV01
TCRBV02
TCRBV03
TCRBV04
TCRBV05.1
TCRBV05.2
TCRBV06
TCRBV07
TCRBV08.1
TCRBV08.2
TCRBV08.3
GGJ0a
GGJ0b
GGJ0c
GGJ0d
GGJ0e
GGJ0f
excluded
GG7sb
GG7sa
GG7sc
GG7sd
GG7se
GG7sf
GG20sa
GG20sb
GG20sc
GG20sd
GG20se
GG20sf
GG27sa
GG27sb
GG27sc
GG27sd
GG27se
GG27sf
DrawArray parameters
when <
color
excluded
5
11
16
21
26
32
37

FIG. 50A


TCRBV09
TCRBV10
TCRBV11
TCRBV12
TCRBV13
TCRBV14
TCRBV15
TCRBV16
TCRBV18
TCRBV19
TCRBV20
excluded
excluded
excluded

Parameters of file to use		DA PWK/R-CD8+			
	Workbook	Sheet	Group	Nature	Remark
1	DF BB/017	Data.3	1	RJOa	1
2	DF BB/018	Data.1	1	RJOb	2
3	DF BB/015	Data.3	1	RJOc	3
4	DF BB/016	Data.1	1	RJOd	4
5	DF BB/016	Data.2	1	RJOe	5
6	DF BB/016	Data.3	1	RJOf	6
7	DF BB/007	Data.1	2	R7sa	7
8	DF BB/007	Data.2	2	R7sb	8
9	DF BB/008	Data.1	2	R7sc	9
10	DF BB/008	Data.2	2	R7sd	10
11	DF BB/008	Data.3	2	R7se	11
12	DF BB/018	Data.2	2	R7sf	12
13	DF BB/025	Data.1	3	R20sa	13
14	DF BB/025	Data.2	3	R20sb	14
15	DF BB/025	Data.3	3	R20sc	15
16	DF BB/026	Data.1	3	R20sd	16
17	DF BB/026	Data.2	3	R20se	17
18	DF BB/026	Data.3	3	R20sf	18
19	DF BB/033	Data.1	4	R27sa	19
20	DF BB/033	Data.2	4	R27sb	20
21	DF BB/033	Data.3	4	R27sc	21
22	DF BB/034	Data.1	4	R27sd	22
23	DF BB/034	Data.2	4	R27se	23
24	DF BB/034	Data.3	4	R27sf	24

FIG. 51

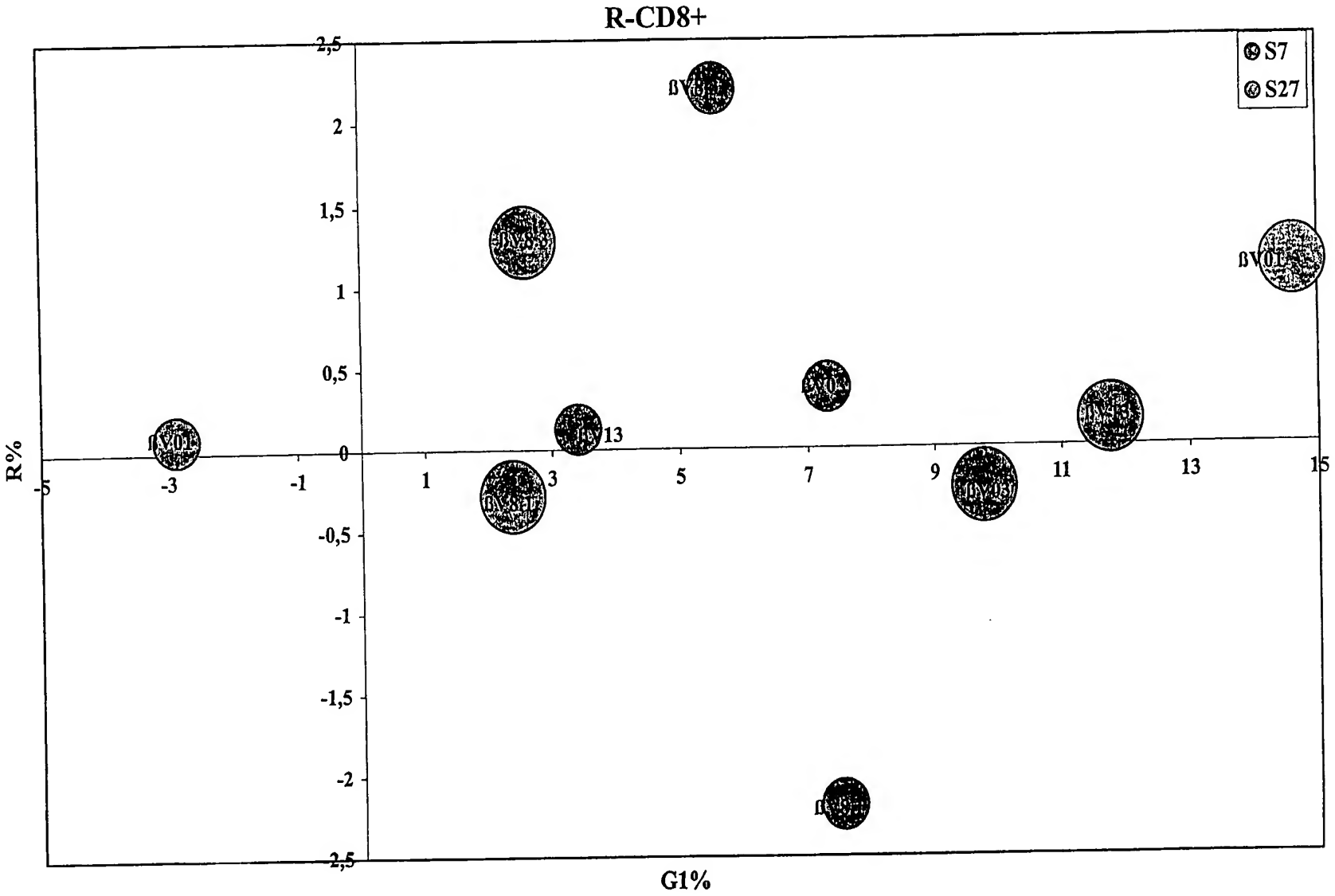


FIG. 52

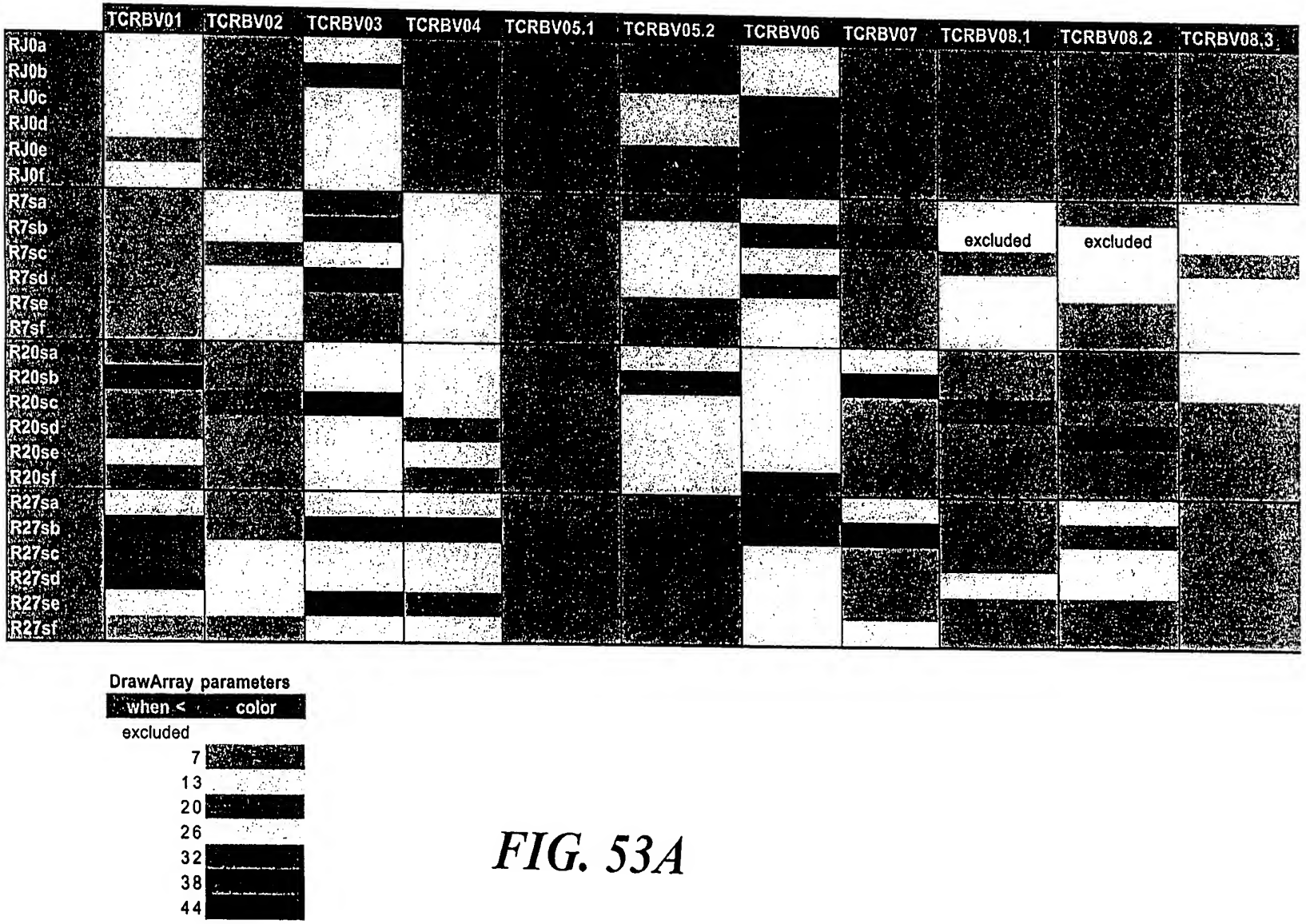

TCRBV01
TCRBV02
TCRBV03
TCRBV04
TCRBV05.1
TCRBV05.2
TCRBV06
TCRBV07
TCRBV08.1
TCRBV08.2
TCRBV08.3
RJ0a
RJ0b
RJ0c
RJ0d
RJ0e
RJ0f
R7sa
R7sb
R7sc
R7sd
R7se
R7sf
R20sa
R20sb
R20sc
R20sd
R20se
R20sf
R27sa
R27sb
R27sc
R27sd
R27se
R27sf
excluded
excluded
DrawArray parameters
when <
color
excluded
7
13
20
26
32
38
44

FIG. 53A

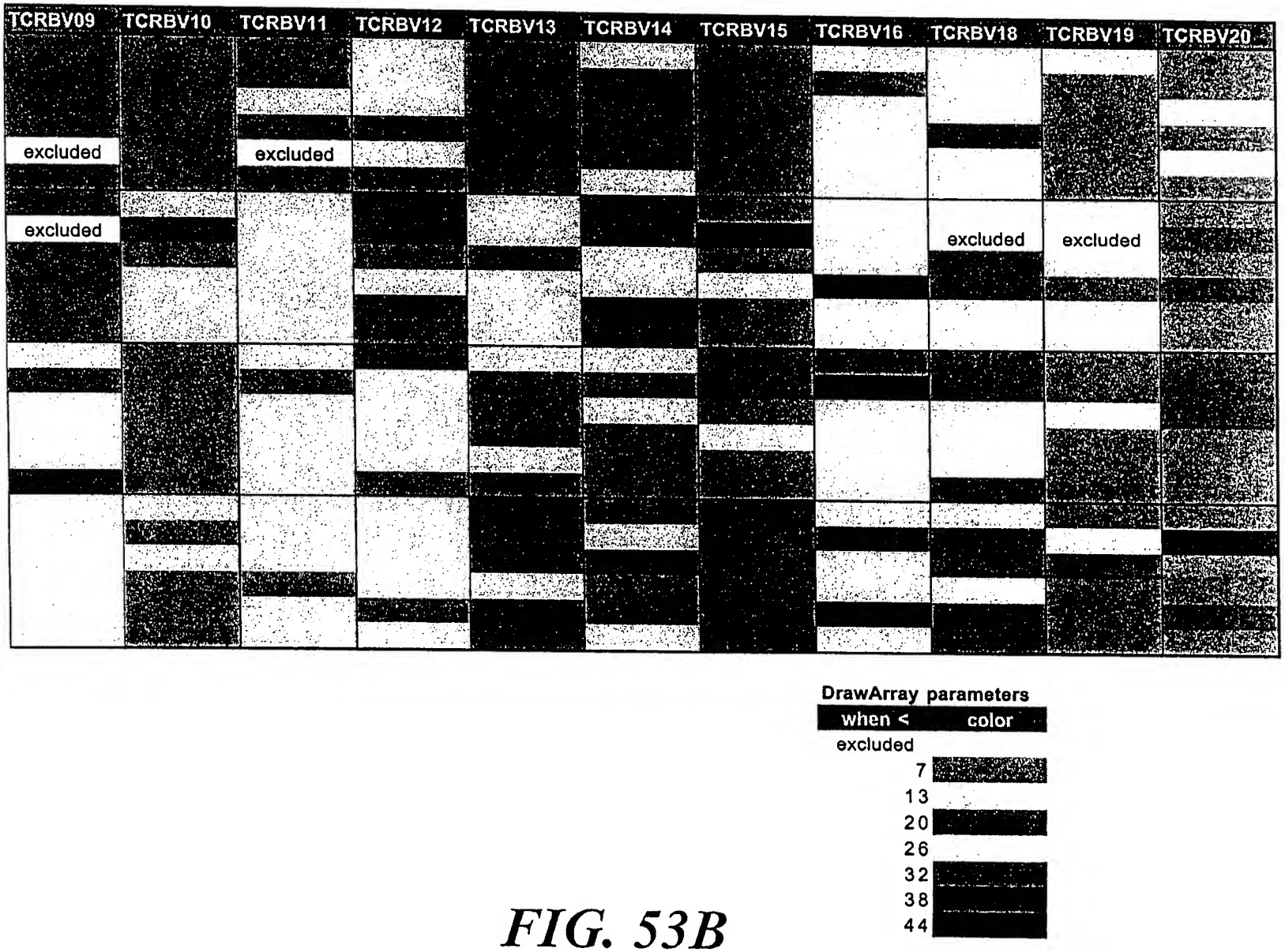

TCRBV09
TCRBV10
TCRBV11
TCRBV12
TCRBV13
TCRBV14
TCRBV15
TCRBV16
TCRBV18
TCRBV19
TCRBV20
excluded
excluded
excluded
excluded
excluded
DrawArray parameters
when <
color
excluded
7
13
20
26
32
38
44

FIG. 53B

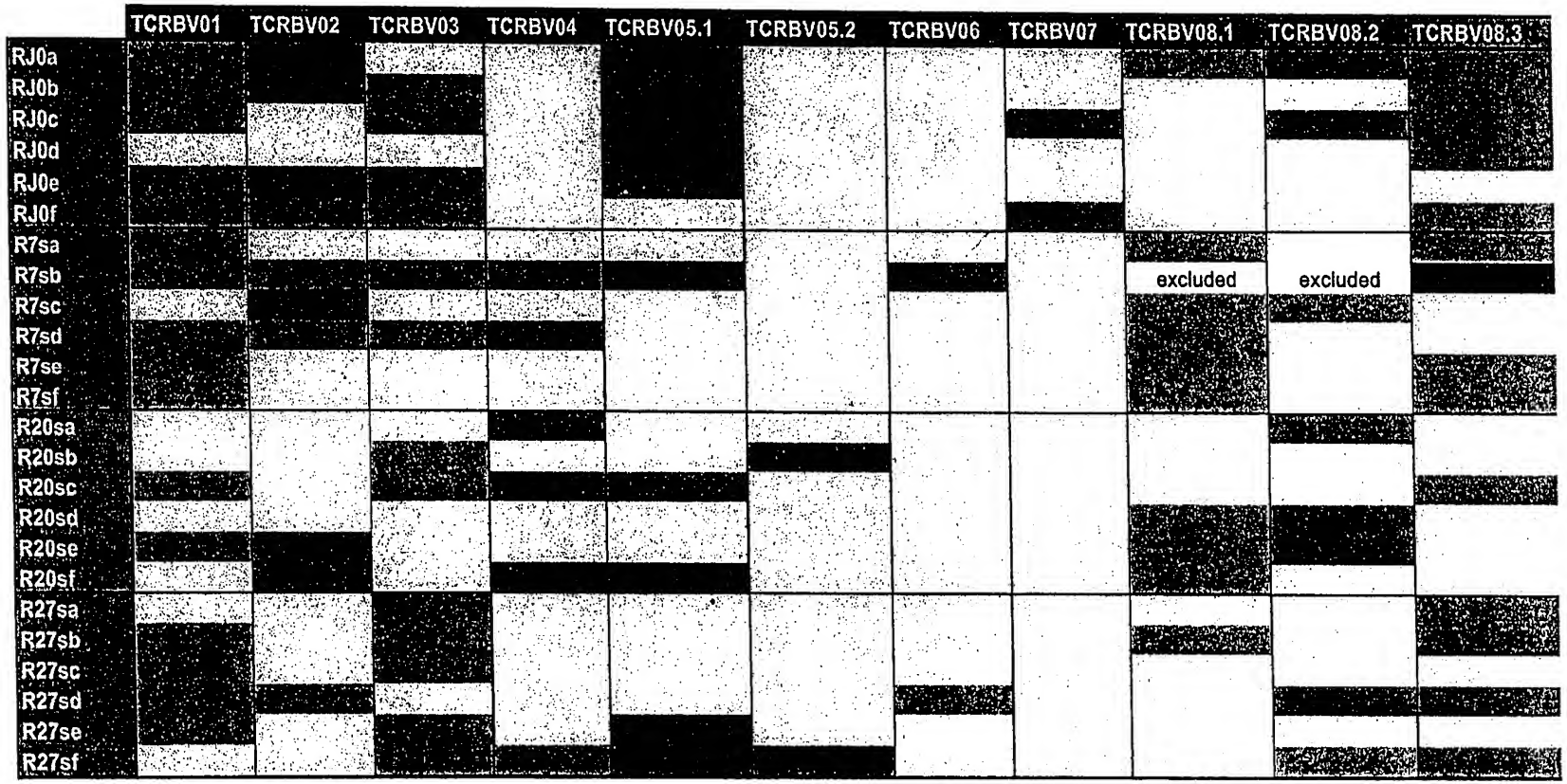

TCRBV01
TCRBV02
TCRBV03
TCRBV04
TCRBV05.1
TCRBV05.2
TCRBV06
TCRBV07
TCRBV08.1
TCRBV08.2
TCRBV08.3
RJ0a
RJ0b
RJ0c
RJ0d
RJ0e
RJ0f
R7sa
R7sb
R7sc
R7sd
R7se
R7sf
R20sa
R20sb
R20sc
R20sd
R20se
R20sf
R27sa
R27sb
R27sc
R27sd
R27se
R27sf
excluded
excluded
DrawArray parameters
when <
color
excluded
3
7
10
13
17
20
24

FIG. 55A

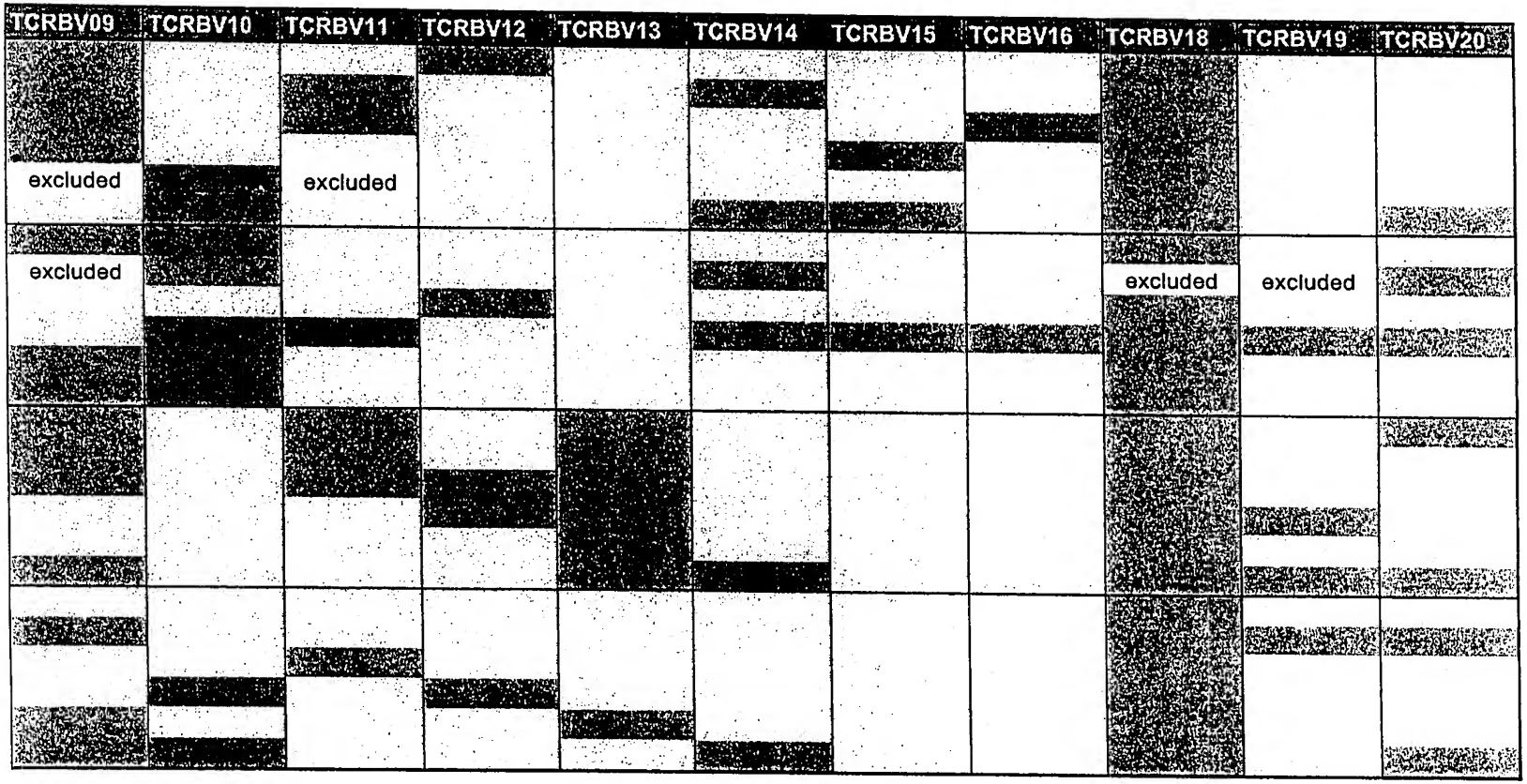

TCRBV09
TCRBV10
TCRBV11
TCRBV12
TCRBV13
TCRBV14
TCRBV15
TCRBV16
TCRBV18
TCRBV19
TCRBV20
excluded
excluded
excluded
excluded
excluded
DrawArray parameters
when <
color
excluded
3
7
10
13
17
20
24

FIG. 55B

Parameters of file to use

	Workbook	Sheet	Group	Nature	Remarks
1	EF/043 DF	Data.2	1	TN01 spleen	
2	EF/022 DF	Data.1	1	TN02 spleen	
3	EF/018 DF	Data.1	1	TN03 spleen	
4	EF/038 DF	Data.3	1	TN04 spleen	
5	EF/039 DF	Data.1	2	J3-01 spleen	
6	EF/016 DF	Data.1	2	J3-02 spleen	
7	EF/034 DF	Data.1	2	J3-03 spleen	
8	EF/046 DF	Data.2	2	J3-04 spleen	
9	EF/023 DF	Data.2	2	J3-05 spleen	
10	EF/029 DF	Data.3	3	J4-01 spleen	
11	EF/026 DF	Data.1	3	J4-02 spleen	
12	EF/029 DF	Data.1	3	J4-03 spleen	
13	EF/036 DF	Data.2	3	J4-04 spleen	
14	EF/019 DF	Data.2	3	J4-06 spleen	
15	EF/038 DF	Data.1	3	J4-07 spleen	
16	EF/045 DF	Data.1	3	J4-08 spleen	
17	EF/042 DF	Data.3	3	J4-09 spleen	
18	EF/042 DF	Data.1	3	J4-10 spleen	
19	EF/016 DF	Data.3	4	J5-01 spleen	
20	EF/026 DF	Data.3	4	J5-02 spleen	
21	EF/031 DF	Data.1	4	J5-03 spleen	
22	EF/021 DF	Data.1	4	J5-04 spleen	
23	EF/021 DF	Data.3	4	J5-05 spleen	
24	EF/028 DF	Data.2	4	J5-06 spleen	
25	EF/043 DF	Data.3	4	J5-07 spleen	
26	EF/041 DF	Data.2	4	J5-08 spleen	
27	EF/012 DF	Data.3	4	J5-09 spleen	
28	EF/046 DF	Data.3	4	J5-10 spleen	
29	EF/024 DF	Data.1	5	J6-01 spleen	
30	EF/017 DF	Data.1	5	J6-02 spleen	
31	EF/025 DF	Data.1	5	J6-03 spleen	
32	EF/040 DF	Data.1	5	J6-04 spleen	
33	EF/014 DF	Data.2	5	J6-05 spleen	
34	EF/020 DF	Data.1	5	J6-06 spleen	
35	EF/033 DF	Data.1	5	J6-07 spleen	
36	EF/030 DF	Data.1	5	J6-08 spleen	
37	EF/013 DF	Data.2	5	J6-09 spleen	
38	EF/027 DF	Data.1	5	J6-10 spleen	
39	EF/031 DF	Data.3	6	TSP01 CM+spleen	
40	EF/032 DF	Data.1	6	TSP06 CM+spleen	
41	EF/034 DF	Data.3	6	TSP09 CM+spleen	
42	EF/010 DF	Data.2	6	TSP10 CM+++ spleen	
43	EF/044 DF	Data.1	6	TSP18 CM+++ spleen	
44	EF/037 DF	Data.1	6	TSP19 CM+++ spleen	
45	EF/011 DF	Data.2	6	TSP20 CM+++ spleen	

FIG. 56A

46	EF/022 DF	Data.2	7	TN02 PBL
47	EF/018 DF	Data.2	7	TN03 PBL
48	EF/039 DF	Data.2	8	J3-01 PBL
49	EF/016 DF	Data.2	8	J3-02 PBL
50	EF/034 DF	Data.2	8	J3-03 PBL
51	EF/039 DF	Data.3	8	J3-04 PBL
52	EF/023 DF	Data.3	8	J3-05 PBL
53	EF/031 DF	Data.2	9	J4-01 PBL
54	EF/026 DF	Data.2	9	J4-02 PBL
55	EF/029 DF	Data.2	9	J4-03 PBL
56	EF/036 DF	Data.3	9	J4-04 PBL
57	EF/012 DF	Data.1	9	J4-05 PBL
58	EF/019 DF	Data.3	9	J4-06 PBL
59	EF/038 DF	Data.2	9	J4-07 PBL
60	EF/045 DF	Data.2	9	J4-08 PBL
61	EF/043 DF	Data.1	9	J4-09 PBL
62	EF/042 DF	Data.2	9	J4-10 PBL
63	EF/019 DF	Data.1	10	J5-01 PBL
64	EF/028 DF	Data.1	10	J5-02 PBL
65	EF/035 DF	Data.1	10	J5-03 PBL
66	EF/021 DF	Data.2	10	J5-04 PBL
67	EF/023 DF	Data.1	10	J5-05 PBL
68	EF/028 DF	Data.3	10	J5-06 PBL
69	EF/041 DF	Data.3	10	J5-08 PBL
70	EF/012 DF	Data.2	10	J5-09 PBL
71	EF/041 DF	Data.1	10	J5-10 PBL
72	EF/024 DF	Data.2	11	J6-01 PBL
73	EF/017 DF	Data.2	11	J6-02 PBL
74	EF/025 DF	Data.2	11	J6-03 PBL
75	EF/040 DF	Data.2	11	J6-04 PBL
76	EF/014 DF	Data.1	11	J6-05 PBL
77	EF/020 DF	Data.2	11	J6-06 PBL
78	EF/033 DF	Data.2	11	J6-07 PBL
79	EF/030 DF	Data.2	11	J6-08 PBL
80	EF/013 DF	Data.1	11	J6-09 PBL
81	EF/027 DF	Data.2	11	J6-10 PBL
82	EF/032 DF	Data.2	12	TSP06 CM+PBL
83	EF/035 DF	Data.3	12	TSP09 CM+PBL
84	EF/010 DF	Data.1	12	TSP10 CM+++ PBL
85	EF/044 DF	Data.2	12	TSP18 CM+++ PBL
86	EF/037 DF	Data.2	12	TSP19 CM+++ PBL
87	EF/011 DF	Data.1	12	TSP20 CM+++ PBL

FIG.56B

DA EF P/R final

Plasmodium berghei infection of B10D2 mice

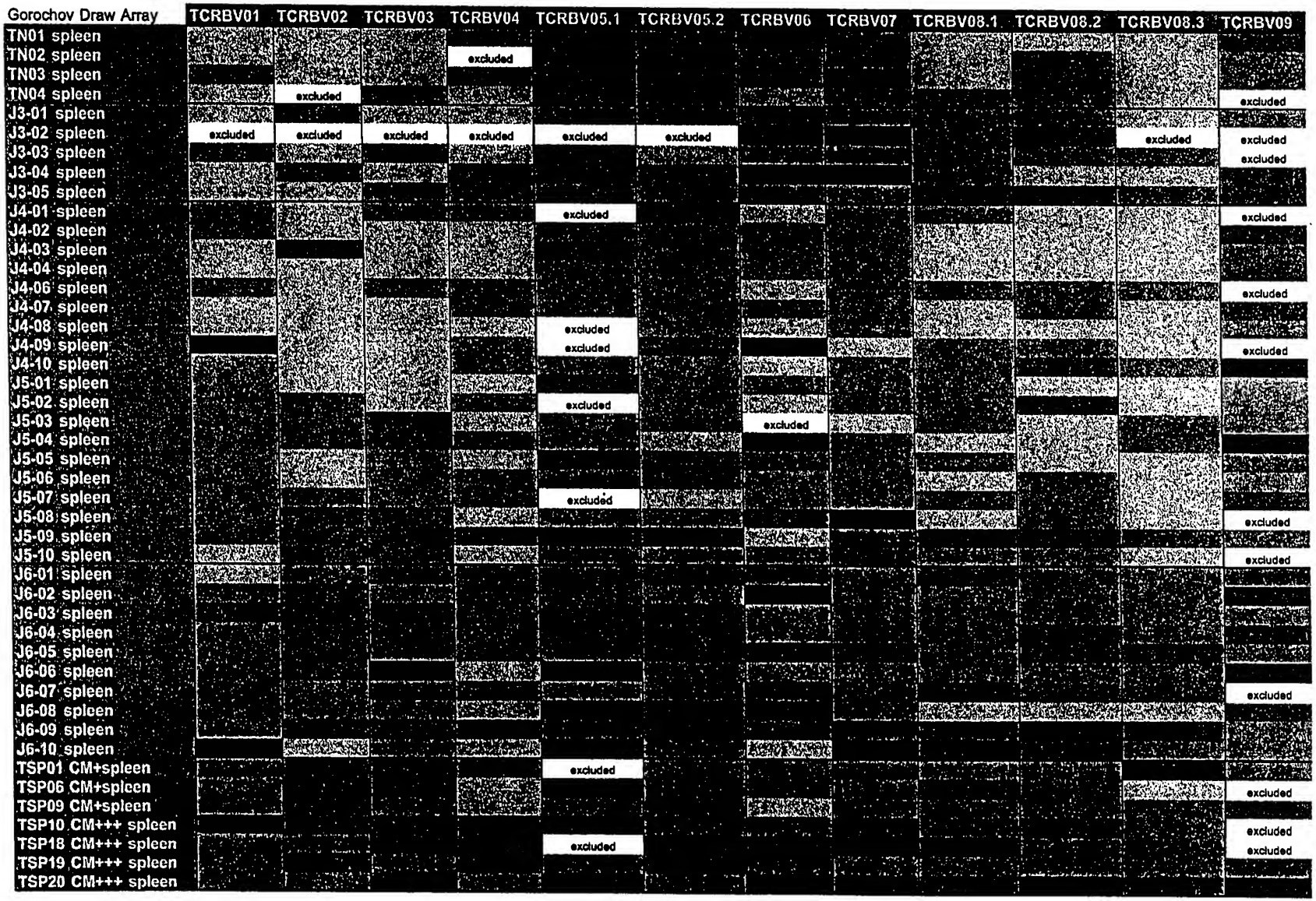


FIG. 57A

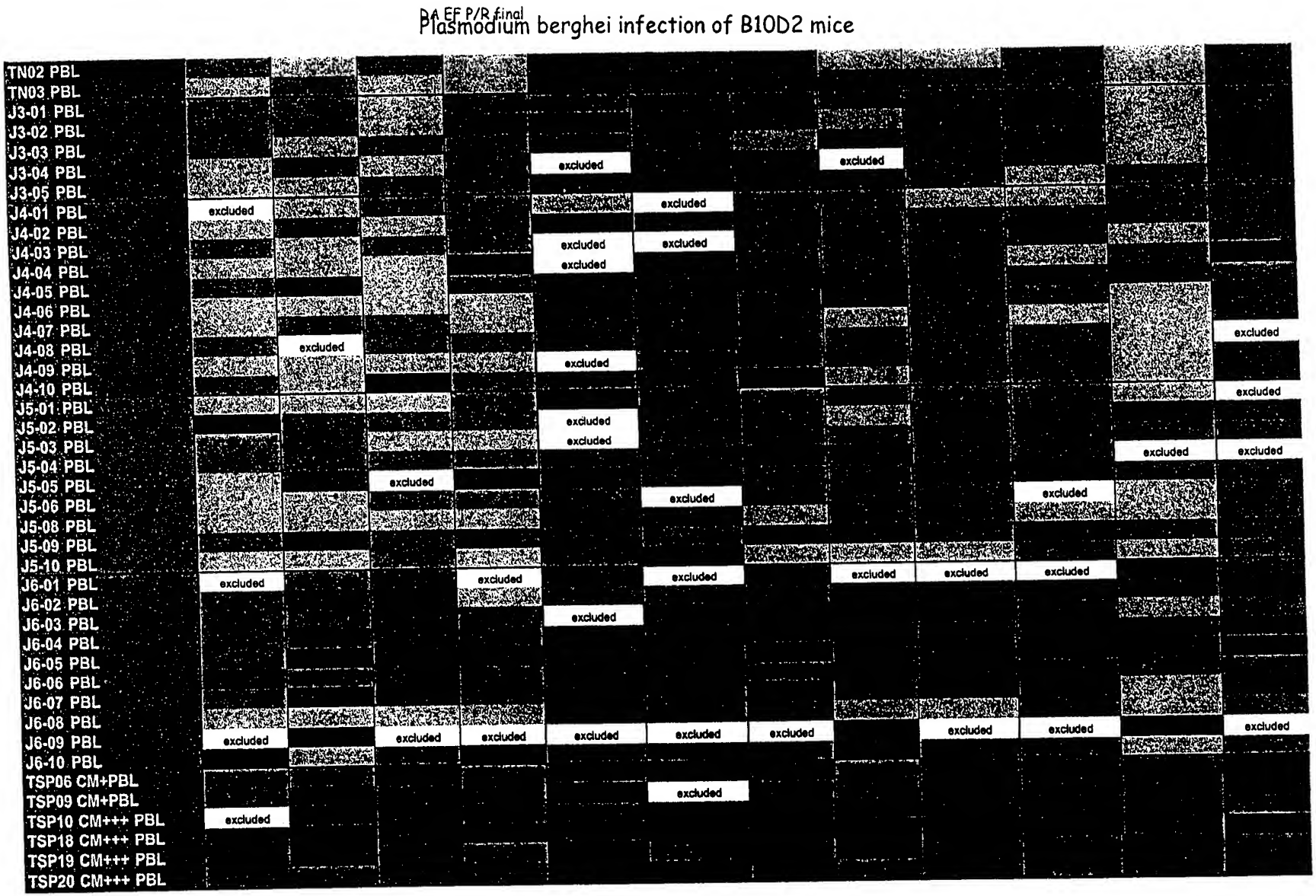
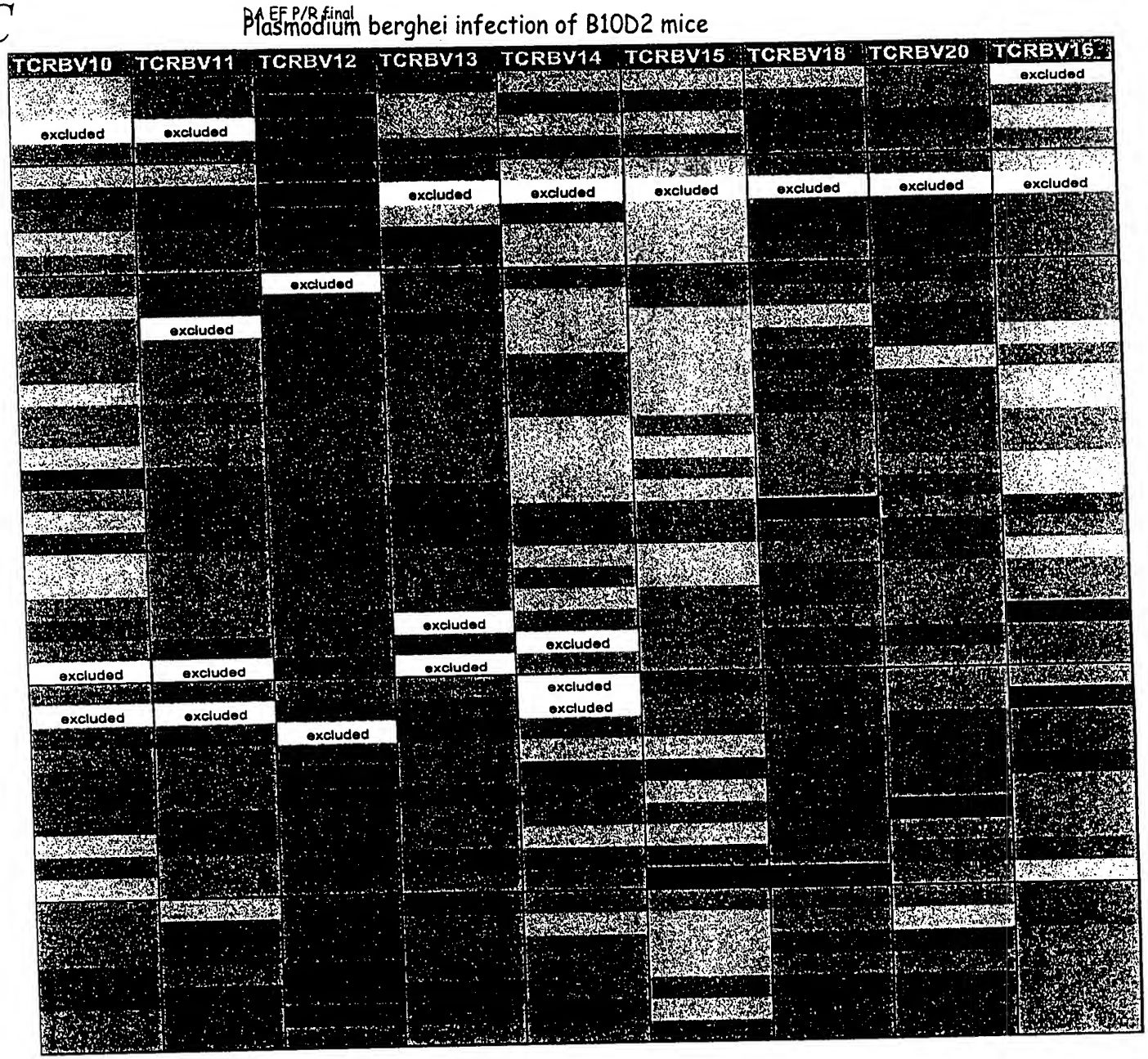

DA EF P/R final
Plasmodium berghei infection of B10D2 mice
TN02 PBL
TN03 PBL
J3-01 PBL
J3-02 PBL
J3-03 PBL
J3-04 PBL
J3-05 PBL
J4-01 PBL
J4-02 PBL
J4-03 PBL
J4-04 PBL
J4-05 PBL
J4-06 PBL
J4-07 PBL
J4-08 PBL
J4-09 PBL
J4-10 PBL
J5-01 PBL
J5-02 PBL
J5-03 PBL
J5-04 PBL
J5-05 PBL
J5-06 PBL
J5-08 PBL
J5-09 PBL
J5-10 PBL
J6-01 PBL
J6-02 PBL
J6-03 PBL
J6-04 PBL
J6-05 PBL
J6-06 PBL
J6-07 PBL
J6-08 PBL
J6-09 PBL
J6-10 PBL
TSP06 CM+PBL
TSP09 CM+PBL
TSP10 CM+++ PBL
TSP18 CM+++ PBL
TSP19 CM+++ PBL
TSP20 CM+++ PBL
excluded

FIG. 57B

FIG. 57C


DA EF P/R final
Plasmodium berghei infection of B10D2 mice
TCRBV10
TCRBV11
TCRBV12
TCRBV13
TCRBV14
TCRBV15
TCRBV18
TCRBV20
TCRBV16
excluded

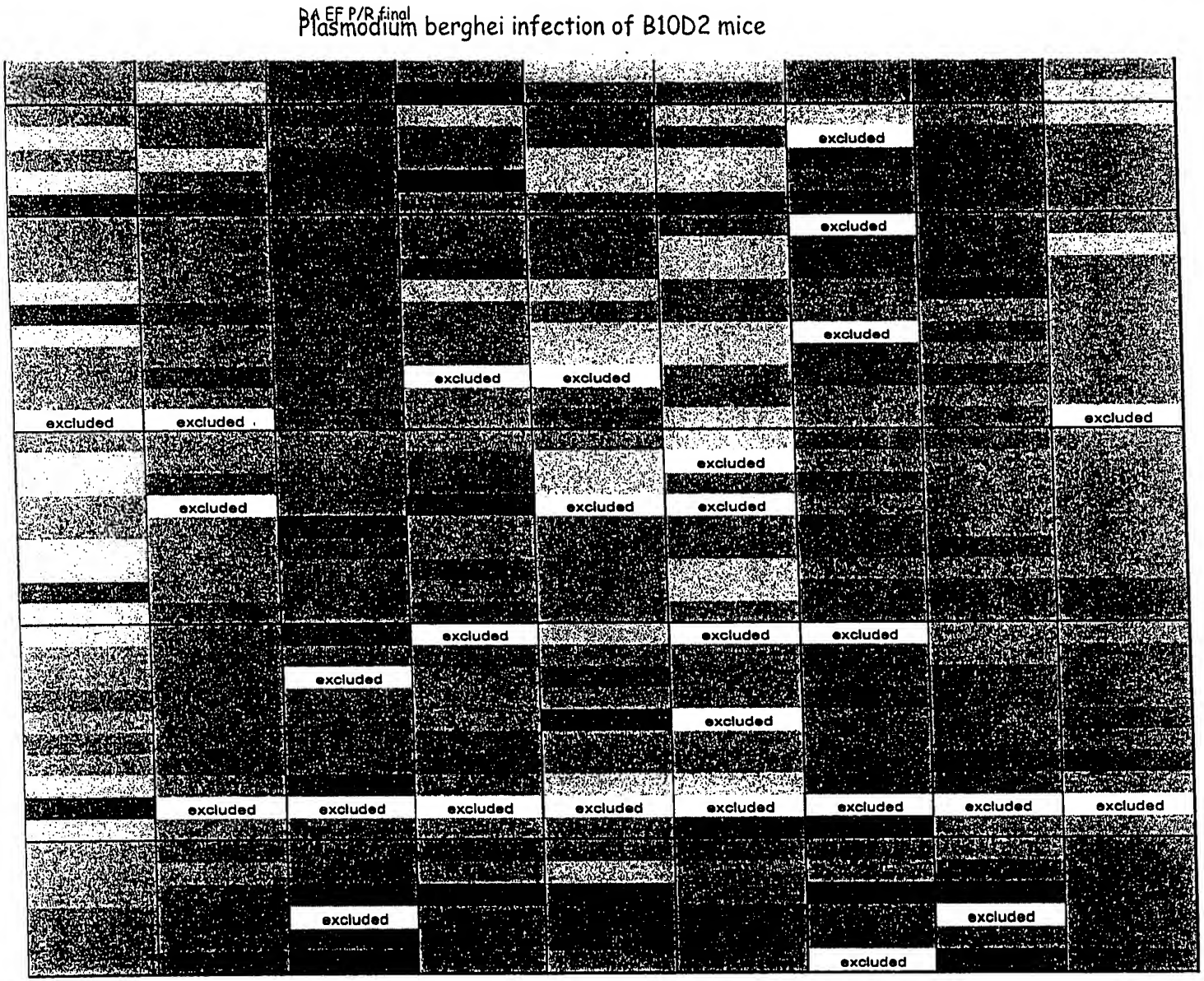

DA EF P/R final
Plasmodium berghei infection of B10D2 mice
excluded

FIG. 57D

FIG. 58A

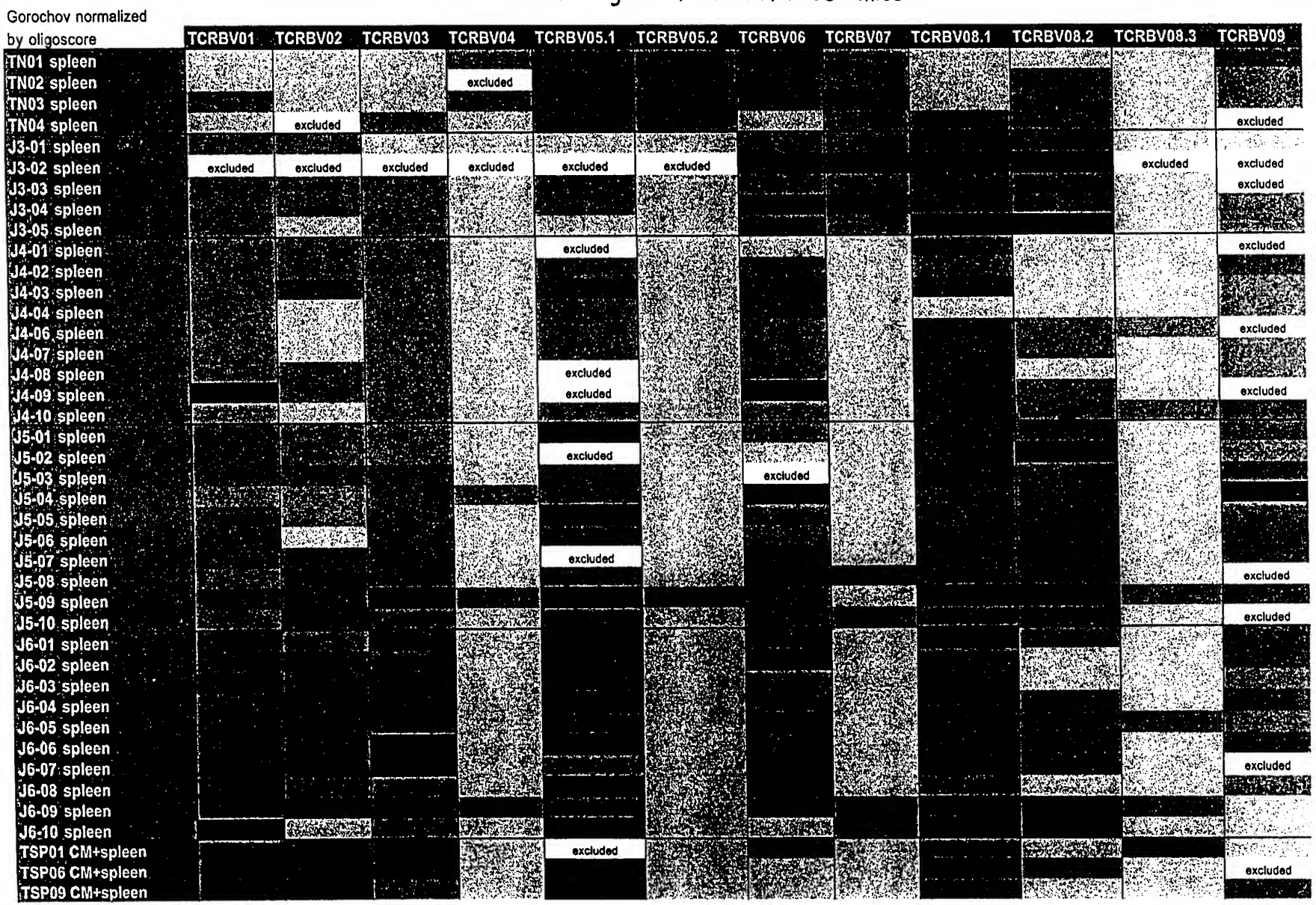

Plasmodium berghei infection of B10D2 mice
Gorochov normalized by oligoscore
TCRBV01
TCRBV02
TCRBV03
TCRBV04
TCRBV05.1
TCRBV05.2
TCRBV06
TCRBV07
TCRBV08.1
TCRBV08.2
TCRBV08.3
TCRBV09
TN01 spleen
TN02 spleen
TN03 spleen
TN04 spleen
J3-01 spleen
J3-02 spleen
J3-03 spleen
J3-04 spleen
J3-05 spleen
J4-01 spleen
J4-02 spleen
J4-03 spleen
J4-04 spleen
J4-06 spleen
J4-07 spleen
J4-08 spleen
J4-09 spleen
J4-10 spleen
J5-01 spleen
J5-02 spleen
J5-03 spleen
J5-04 spleen
J5-05 spleen
J5-06 spleen
J5-07 spleen
J5-08 spleen
J5-09 spleen
J5-10 spleen
J6-01 spleen
J6-02 spleen
J6-03 spleen
J6-04 spleen
J6-05 spleen
J6-06 spleen
J6-07 spleen
J6-08 spleen
J6-09 spleen
J6-10 spleen
TSP01 CM+spleen
TSP06 CM+spleen
TSP09 CM+spleen
excluded

FIG. 58B

Plasmodium berghei infection of B10D2 mice

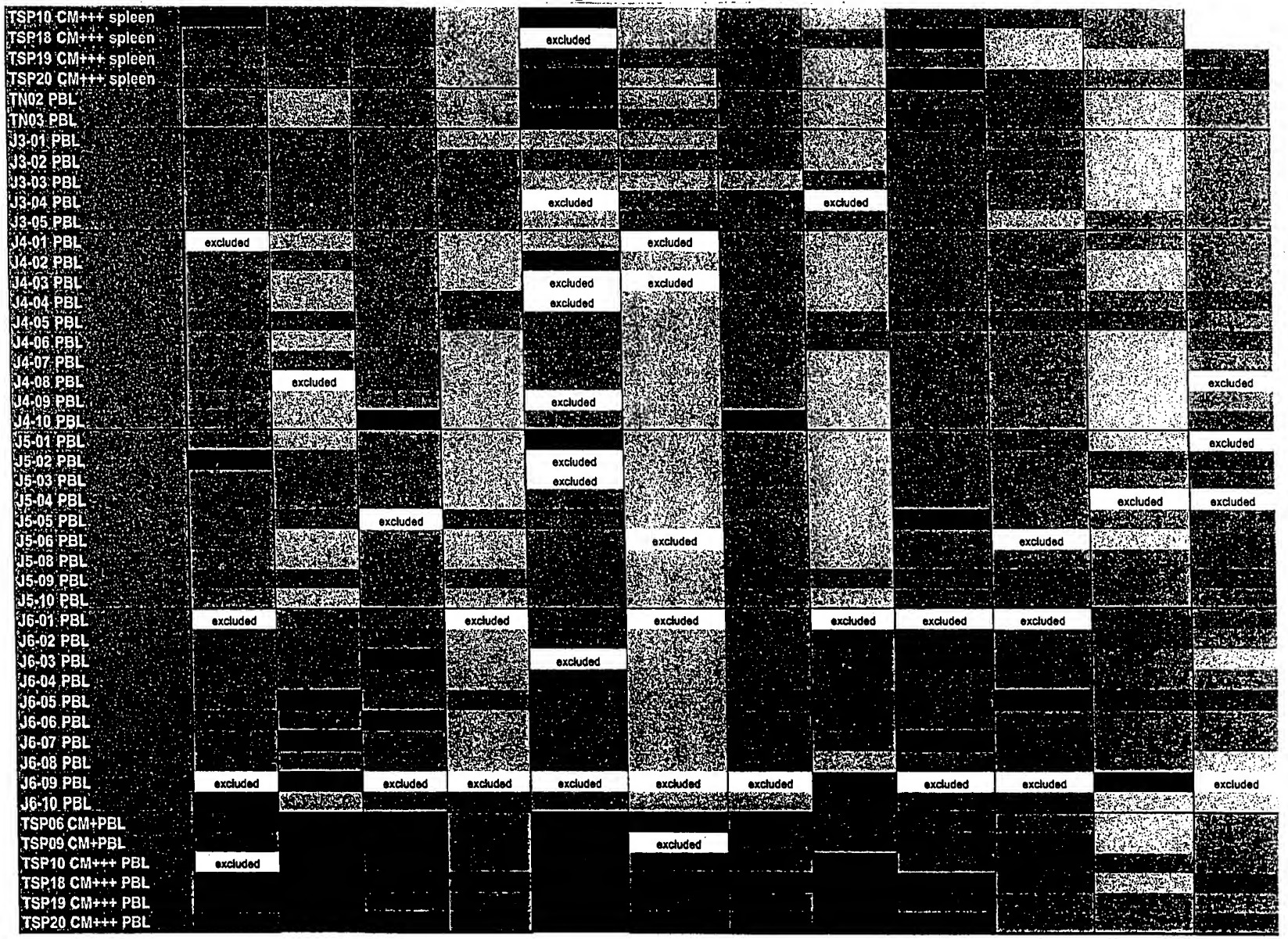


FIG. 58C

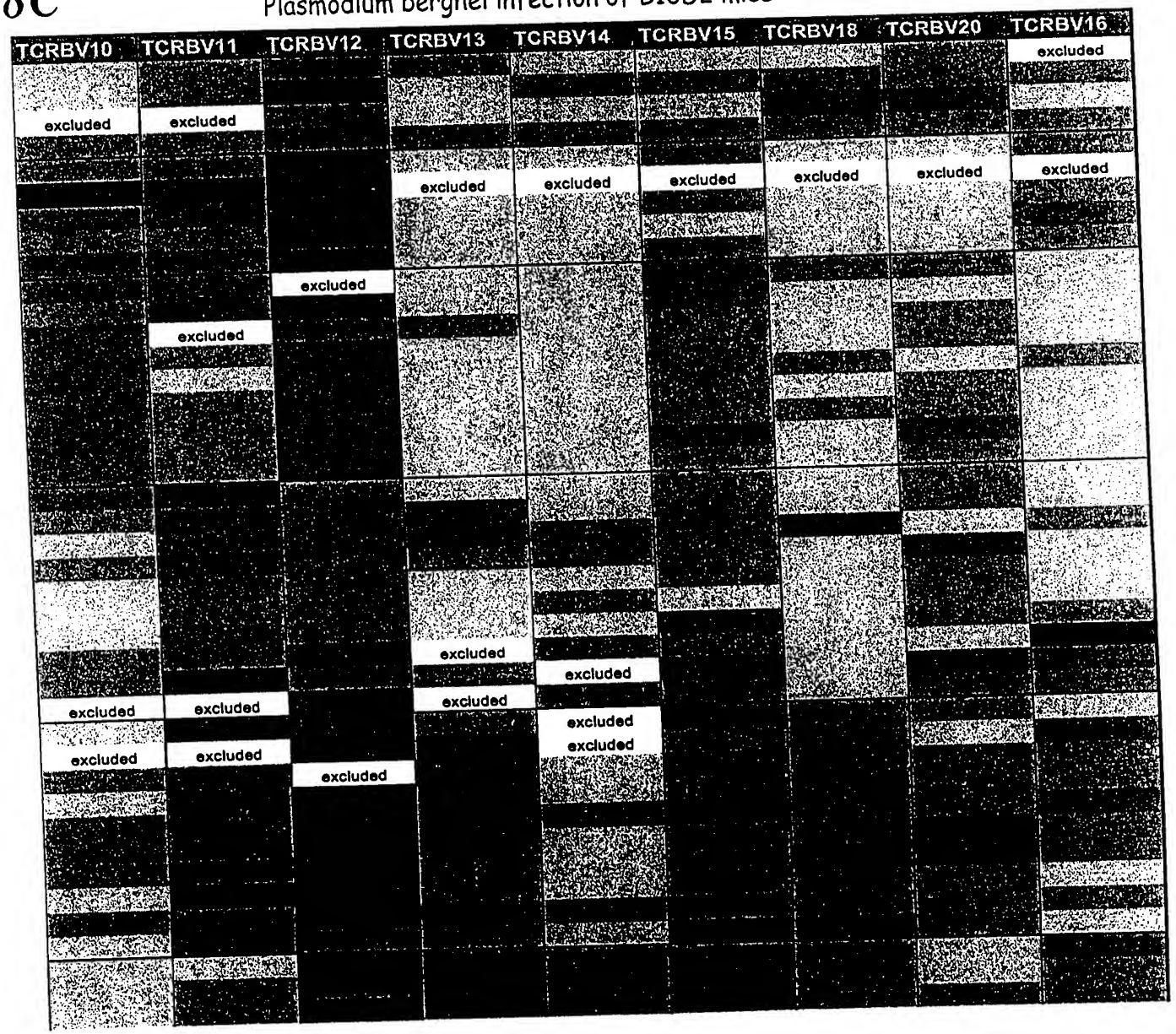

Plasmodium berghei infection of B10D2 mice
TCRBV10
TCRBV11
TCRBV12
TCRBV13
TCRBV14
TCRBV15
TCRBV18
TCRBV20
TCRBV16
excluded

FIG. 58D

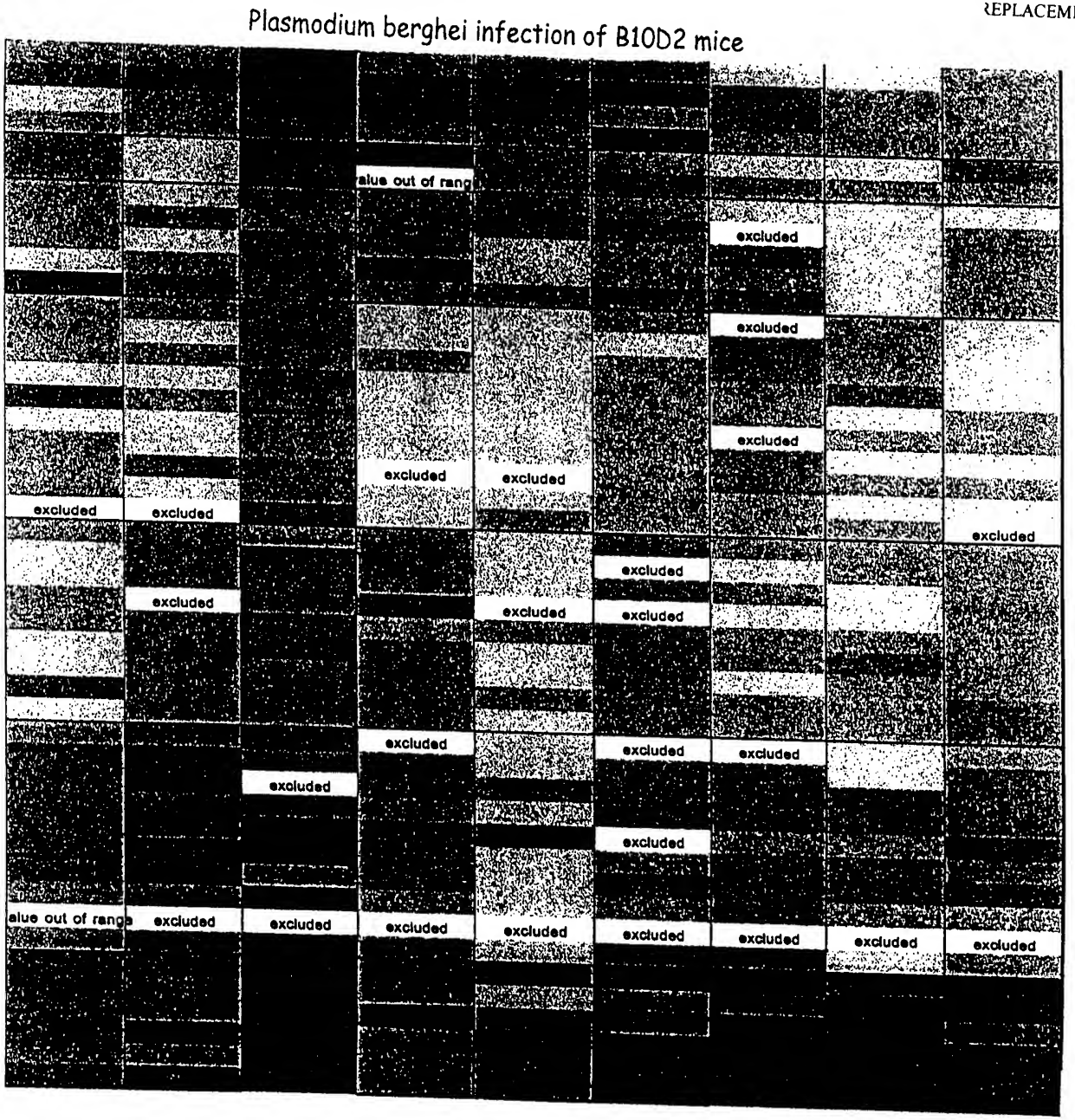

Plasmodium berghei infection of B10D2 mice
alue out of rang
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
alue out of rang
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded
excluded

FIG. 59A

Tableau ANOVA pour TCRBV01

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	487,099	44,282	,963	,4876	10,593	,481
Résidu	70	3218,716	45,982				

Tableau de moyennes pour TCRBV01
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	5	12,655	6,248	2,794
CM+S	7	11,770	8,471	3,202
J3P	5	5,210	1,421	,636
J3S	4	5,197	1,317	,659
J4P	9	5,749	2,066	,689
J4S	9	8,000	8,378	2,793
J5P	9	7,802	9,117	3,039
J5S	10	6,450	1,743	,551
J6P	8	10,107	9,711	3,433
J6S	10	10,615	8,486	2,683
TNP	2	4,928	1,360	,961
TNS	4	5,823	2,616	1,308

FIG. 59B

Graphique des interactions pour TCRBV01
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

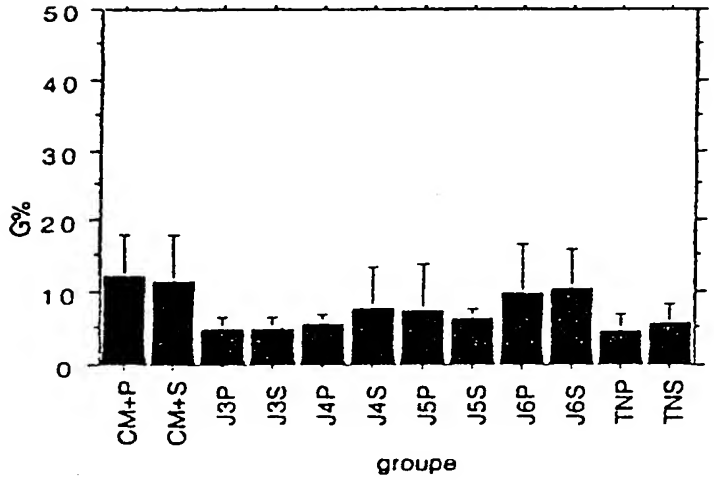


FIG.59C

Test PLSD de Fisher pour TCRBV01
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p
CM+P, CM+S	,685	7,919	,8242
CM+P, J3P	7,445	8,553	,0870
CM+P, J3S	7,458	9,072	,1056
CM+P, J4P	6,906	7,543	,0721
CM+P, J4S	4,655	7,543	,2225
CM+P, J5P	4,852	7,543	,2037
CM+P, J5S	6,205	7,408	,0993
CM+P, J6P	2,548	7,710	,5120
CM+P, J6S	2,040	7,408	,5846
CM+P, TNP	7,727	11,315	,1776
CM+P, TNS	6,832	9,072	,1376
CM+S, J3P	6,560	7,919	,1030
CM+S, J3S	6,573	8,477	,1265
CM+S, J4P	6,021	6,816	,0625
CM+S, J4S	3,770	6,816	,2738
CM+S, J5P	3,967	6,816	,2496
CM+S, J5S	5,320	6,665	,1159
CM+S, J6P	1,662	6,999	,6372
CM+S, J6S	1,155	6,665	,7308
CM+S, TNP	6,842	10,844	,2124
CM+S, TNS	5,947	8,477	,1662
J3P, J3S	,013	9,072	,9977
J3P, J4P	-,539	7,543	,8870
J3P, J4S	-2,790	7,543	,4632
J3P, J5P	-2,593	7,543	,4953
J3P, J5S	-1,240	7,408	,7395
J3P, J6P	-4,897	7,710	,2094
J3P, J6S	-5,405	7,408	,1500
J3P, TNP	,282	11,315	,9605
J3P, TNS	-,613	9,072	,8932
J3S, J4P	-,552	8,127	,8926
J3S, J4S	-2,803	8,127	,4938
J3S, J5P	-2,605	8,127	,5247
J3S, J5S	-1,253	8,001	,7557
J3S, J6P	-4,910	8,282	,2410
J3S, J6S	-5,418	8,001	,1812
J3S, TNP	,269	11,712	,9636
J3S, TNS	-,626	9,563	,8965
J4P, J4S	-2,251	6,375	,4837
J4P, J5P	-2,053	6,375	,5228
J4P, J5S	-,701	6,214	,8227
J4P, J6P	-4,358	6,572	,1902
J4P, J6S	-4,866	6,214	,1228
J4P, TNP	,821	10,572	,8773
J4P, TNS	-,074	8,127	,9856
J4S, J5P	,198	6,375	,9509
J4S, J5S	1,550	6,214	,6204
J4S, J6P	-2,107	6,572	,5246
J4S, J6S	-2,615	6,214	,4041
J4S, TNP	3,072	10,572	,5641
J4S, TNS	2,177	8,127	,5948
J5P, J5S	1,352	6,214	,6656
J5P, J6P	-2,305	6,572	,4865
J5P, J6S	-2,813	6,214	,3697
J5P, TNP	2,874	10,572	,5894
J5P, TNS	1,980	8,127	,6286
J5S, J6P	-3,657	6,415	,2594
J5S, J6S	-4,165	6,048	,1740
J5S, TNP	1,522	10,476	,7729
J5S, TNS	,627	8,001	,8762
J6P, J6S	-,508	6,415	,8750
J6P, TNP	5,179	10,692	,3373
J6P, TNS	4,284	8,282	,3057
J6S, TNP	5,687	10,476	,2826
J6S, TNS	4,792	8,001	,2363
TNP, TNS	-,895	11,712	,8793

FIG. 59D

FIG.59E

Tableau ANOVA pour TCRBV02

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	2669,319	242,665	7,138	<,0001	78,523	1,000
Résidu	72	2447,564	33,994				

Tableau de moyennes pour TCRBV02
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	24,950	9,665	3,946
CM+S	7	13,764	4,939	1,867
J3P	5	5,477	,881	,394
J3S	4	4,920	1,670	,835
J4P	9	5,462	3,842	1,281
J4S	9	4,352	2,535	,845
J5P	9	6,816	3,816	1,272
J5S	10	8,401	4,782	1,512
J6P	10	14,921	11,227	3,550
J6S	10	11,333	4,562	1,443
TNP	2	5,715	2,955	2,089
TNS	3	2,963	,461	,266

FIG. 59F

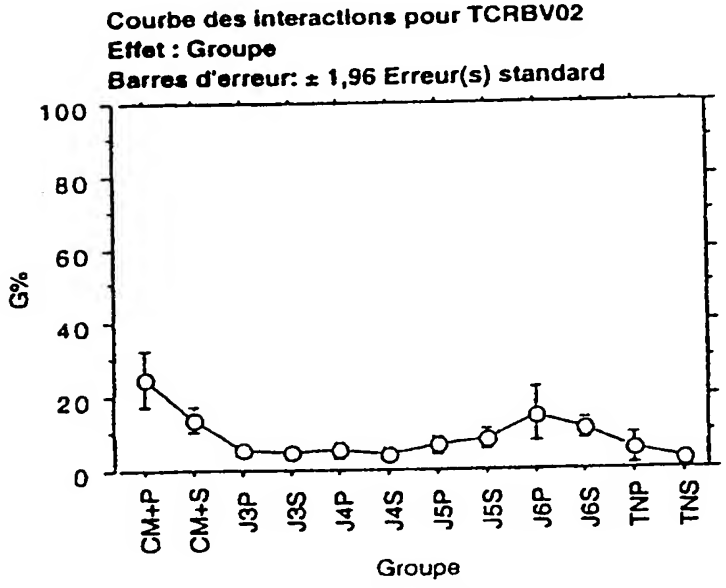


FIG. 59G

Test PLSD de Fisher pour TCRBV02
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	11,186	6,466	,0009	S
CM+P, J3P	19,473	7,038	<,0001	S
CM+P, J3S	20,031	7,502	<,0001	S
CM+P, J4P	19,489	6,126	<,0001	S
CM+P, J4S	20,598	6,126	<,0001	S
CM+P, J5P	18,135	6,126	<,0001	S
CM+P, J5S	16,550	6,002	<,0001	S
CM+P, J6P	10,029	6,002	,0014	S
CM+P, J6S	13,618	6,002	<,0001	S
CM+P, TNP	19,235	9,490	,0001	S
CM+P, TNS	21,987	8,219	<,0001	S
CM+S, J3P	8,287	6,806	,0177	S
CM+S, J3S	8,845	7,285	,0180	S
CM+S, J4P	8,303	5,857	,0061	S
CM+S, J4S	9,412	5,857	,0020	S
CM+S, J5P	6,949	5,857	,0207	S
CM+S, J5S	5,364	5,728	,0660	
CM+S, J6P	-1,157	5,728	,6884	
CM+S, J6S	2,432	5,728	,4002	
CM+S, TNP	8,049	9,319	,0894	
CM+S, TNS	10,801	8,020	,0090	S
J3P, J3S	,558	7,797	,8870	
J3P, J4P	,016	6,483	,9962	
J3P, J4S	1,125	6,483	,7304	
J3P, J5P	-1,339	6,483	,6818	
J3P, J5S	-2,923	6,366	,3630	
J3P, J6P	-9,444	6,366	,0042	S
J3P, J6S	-5,855	6,366	,0709	
J3P, TNP	-,238	9,724	,9612	
J3P, TNS	2,514	8,488	,5568	
J3S, J4P	-,542	6,984	,8775	
J3S, J4S	,567	6,984	,8718	
J3S, J5P	-1,896	6,984	,5900	
J3S, J5S	-3,481	6,876	,3163	
J3S, J6P	-10,002	6,876	,0049	S
J3S, J6S	-6,413	6,876	,0671	
J3S, TNP	-,796	10,066	,8752	
J3S, TNS	1,956	8,877	,6618	
J4P, J4S	1,109	5,479	,6877	
J4P, J5P	-1,354	5,479	,6237	
J4P, J5S	-2,939	5,340	,2762	
J4P, J6P	-9,460	5,340	,0007	S
J4P, J6S	-5,871	5,340	,0316	S
J4P, TNP	-,254	9,086	,9557	
J4P, TNS	2,498	7,749	,5225	
J4S, J5P	-2,463	5,479	,3731	
J4S, J5S	-4,048	5,340	,1351	
J4S, J6P	-10,589	5,340	,0002	S
J4S, J6S	-6,980	5,340	,0111	S
J4S, TNP	-1,363	9,086	,7658	
J4S, TNS	1,389	7,749	,7219	
J5P, J5S	-1,585	5,340	,5560	
J5P, J6P	-8,106	5,340	,0034	S
J5P, J6S	-4,517	5,340	,0961	
J5P, TNP	1,100	9,086	,8099	
J5P, TNS	3,852	7,749	,3250	
J5S, J6P	-6,521	5,198	,0147	S
J5S, J6S	-2,932	5,198	,2646	
J5S, TNP	2,685	9,003	,5540	
J5S, TNS	5,437	7,651	,1609	
J6P, J6S	3,589	5,198	,1730	
J6P, TNP	9,206	9,003	,0452	S
J6P, TNS	11,958	7,651	,0026	S
J6S, TNP	5,617	9,003	,2176	
J6S, TNS	8,369	7,651	,0325	S
TNP, TNS	2,752	10,610	,6067	

FIG. 59 H

FIG. 60A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	1734,159	157,651	4,890	<,0001	53,795	1,000
Résidu	72	2321,022	32,236				

FIG. 60B

Tableau de moyennes pour TCRBV03
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	18,836	3,623	1,479
CM+S	7	10,820	2,765	1,045
J3P	5	5,331	1,231	,551
J3S	4	5,430	1,650	,825
J4P	10	7,461	8,978	2,839
J4S	9	4,415	,982	,327
J5P	8	5,793	1,245	,440
J5S	10	10,189	5,355	1,693
J6P	9	13,548	6,523	2,174
J6S	10	15,192	9,694	3,066
TNP	2	5,383	1,319	,933
TNS	4	3,344	1,322	,661

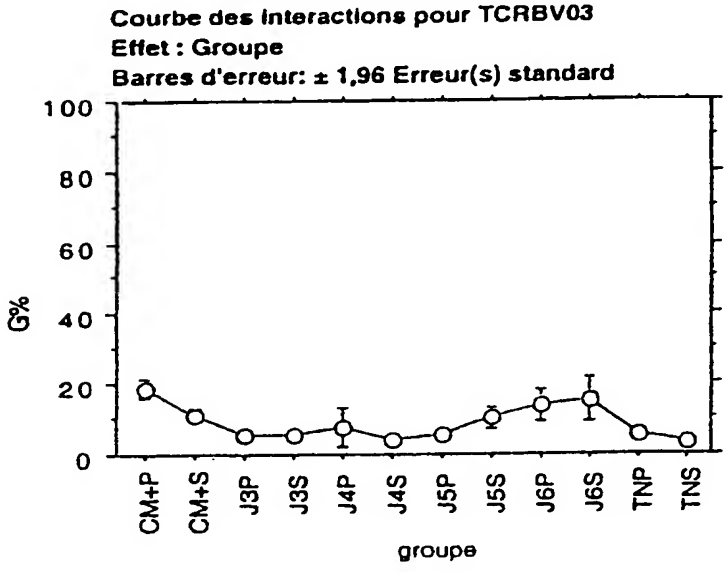


FIG.60C

FIG. 60D

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	8,016	6,297	,0133	S
CM+P, J3P	13,505	6,854	,0002	S
CM+P, J3S	13,408	7,306	,0005	S
CM+P, J4P	11,374	5,845	,0002	S
CM+P, J4S	14,421	5,965	<,0001	S
CM+P, J5P	13,043	6,113	<,0001	S
CM+P, J5S	8,647	5,845	,0043	S
CM+P, J6P	5,288	5,965	,0815	
CM+P, J6S	3,844	5,845	,2180	
CM+P, TNP	13,452	9,241	,0049	S
CM+P, TNS	15,491	7,306	<,0001	S
CM+S, J3P	5,489	6,627	,1031	
CM+S, J3S	5,391	7,094	,1342	
CM+S, J4P	3,359	5,578	,2339	
CM+S, J4S	6,405	5,704	,0283	S
CM+S, J5P	5,027	5,858	,0914	
CM+S, J5S	,632	5,578	,8221	
CM+S, J6P	-2,728	5,704	,3436	
CM+S, J6S	-4,372	5,578	,1226	
CM+S, TNP	5,437	9,075	,2363	
CM+S, TNS	7,476	7,094	,0392	S
J3P, J3S	-,099	7,593	,9794	
J3P, J4P	-2,130	6,199	,4955	
J3P, J4S	,916	6,313	,7732	
J3P, J5P	-,462	6,452	,8869	
J3P, J5S	-4,858	6,199	,1227	
J3P, J6P	-8,217	6,313	,0115	S
J3P, J6S	-9,861	6,199	,0022	S
J3P, TNP	-,052	9,470	,9912	
J3P, TNS	1,987	7,593	,6035	
J3S, J4P	-2,032	6,696	,5472	
J3S, J4S	1,015	6,801	,7670	
J3S, J5P	-,363	6,931	,9171	
J3S, J5S	-4,759	6,696	,1609	
J3S, J6P	-8,118	6,801	,0200	S
J3S, J6S	-9,762	6,696	,0049	S
J3S, TNP	,046	9,802	,9925	
J3S, TNS	2,086	8,003	,6050	
J4P, J4S	3,046	5,200	,2468	
J4P, J5P	1,668	5,369	,5376	
J4P, J5S	-2,727	5,062	,2863	
J4P, J6P	-6,087	5,200	,0224	S
J4P, J6S	-7,731	5,062	,0033	S
J4P, TNP	2,078	8,767	,6380	
J4P, TNS	4,117	6,696	,2243	
J4S, J5P	-1,378	5,500	,6190	
J4S, J5S	-5,774	5,200	,0301	S
J4S, J6P	-9,133	5,336	,0011	S
J4S, J6S	-10,777	5,200	<,0001	S
J4S, TNP	-,968	8,848	,8279	
J4S, TNS	1,071	6,801	,7545	
J5P, J5S	-4,396	5,369	,1070	
J5P, J6P	-7,755	5,500	,0064	S
J5P, J6S	-9,399	5,369	,0008	S
J5P, TNP	,410	8,948	,9275	
J5P, TNS	2,449	6,931	,4835	
J5S, J6P	-3,359	5,200	,2020	
J5S, J6S	-5,003	5,062	,0526	
J5S, TNP	4,805	8,767	,2782	
J5S, TNS	6,845	6,696	,0453	S
J6P, J6S	-1,644	5,200	,5306	
J6P, TNP	8,165	8,848	,0700	
J6P, TNS	10,204	6,801	,0038	S
J6S, TNP	9,808	8,767	,0288	S
J6S, TNS	11,848	6,696	,0007	S
TNP, TNS	2,039	9,802	,6796	

FIG. 60E

Tableau ANOVA pour TCRBV04

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	480,614	43,692	,929	,5183	10,216	,465
Résidu	71	3340,055	47,043				

Tableau de moyennes pour TCRBV04
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	12,811	8,847	3,612
CM+S	7	8,619	3,258	1,231
J3P	5	7,932	2,114	,945
J3S	4	5,369	1,230	,615
J4P	10	9,371	10,068	3,184
J4S	9	5,627	2,092	,697
J5P	9	10,016	10,982	3,661
J5S	10	5,395	2,913	,921
J6P	8	10,734	10,645	3,764
J6S	10	6,812	2,906	,919
TNP	2	3,313	,404	,286
TNS	3	5,444	1,555	,898

FIG. 60F

Courbe des interactions pour TCRBV04
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

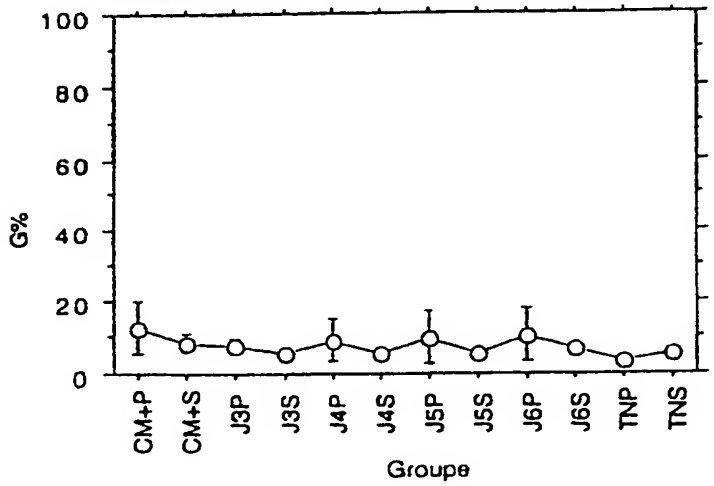


FIG. 60G

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	4,193	7,609	,2756	
CM+P, J3P	4,879	8,281	,2440	
CM+P, J3S	7,442	8,828	,0972	
CM+P, J4P	3,440	7,062	,3347	
CM+P, J4S	7,184	7,208	,0507	
CM+P, J5P	2,795	7,208	,4419	
CM+P, J5S	7,416	7,062	,0398	S
CM+P, J6P	2,077	7,386	,5767	
CM+P, J6S	5,999	7,062	,0947	
CM+P, TNP	9,498	11,166	,0943	
CM+P, TNS	7,368	9,670	,1332	
CM+S, J3P	,687	8,008	,8648	
CM+S, J3S	3,249	8,572	,4522	
CM+S, J4P	-,753	6,740	,8244	
CM+S, J4S	2,992	6,892	,3897	
CM+S, J5P	-1,397	6,892	,6873	
CM+S, J5S	3,223	6,740	,3435	
CM+S, J6P	-2,115	7,078	,5532	
CM+S, J6S	1,806	6,740	,5947	
CM+S, TNP	5,305	10,965	,3379	
CM+S, TNS	3,175	9,437	,5045	
J3P, J3S	2,563	9,174	,5793	
J3P, J4P	-1,439	7,491	,7028	
J3P, J4S	2,305	7,628	,5487	
J3P, J5P	-2,084	7,628	,5877	
J3P, J5S	2,537	7,491	,5017	
J3P, J6P	-2,802	7,797	,4760	
J3P, J6S	1,120	7,491	,7665	
J3P, TNP	4,619	11,442	,4236	
J3P, TNS	2,489	9,988	,6209	
J3S, J4P	-4,002	8,091	,3273	
J3S, J4S	-,258	8,218	,9503	
J3S, J5P	-4,647	8,218	,2634	
J3S, J5S	-,026	8,091	,9949	
J3S, J6P	-5,364	8,375	,2057	
J3S, J6S	-1,443	8,091	,7232	
J3S, TNP	2,056	11,844	,7303	
J3S, TNS	-,074	10,445	,9887	
J4P, J4S	3,744	6,284	,2387	
J4P, J5P	-,645	6,284	,8385	
J4P, J5S	3,976	6,116	,1991	
J4P, J6P	-1,362	6,487	,6766	
J4P, J6S	2,559	6,116	,4069	
J4P, TNP	6,058	10,593	,2580	
J4P, TNS	3,928	9,003	,3873	
J4S, J5P	-4,389	6,447	,1790	
J4S, J5S	,232	6,284	,9416	
J4S, J6P	-5,107	6,645	,1299	
J4S, J6S	-1,185	6,284	,7080	
J4S, TNP	2,314	10,691	,6674	
J4S, TNS	,183	9,117	,9681	
J5P, J5S	4,621	6,284	,1470	
J5P, J6P	-,718	6,645	,8301	
J5P, J6S	3,204	6,284	,3128	
J5P, TNP	6,703	10,691	,2154	
J5P, TNS	4,572	9,117	,3207	
J5S, J6P	-5,339	6,487	,1052	
J5S, J6S	-1,417	6,116	,6455	
J5S, TNP	2,082	10,593	,6963	
J5S, TNS	-,048	9,003	,9915	
J6P, J6S	3,922	6,487	,2321	
J6P, TNP	7,421	10,812	,1755	
J6P, TNS	5,290	9,259	,2584	
J6S, TNP	3,499	10,593	,5123	
J6S, TNS	1,369	9,003	,7627	
TNP, TNS	-2,130	12,484	,7347	

FIG. 60 H

FIG. 61A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	1661,862	151,078	1,949	,0508	21,436	,842
Résidu	59	4574,151	77,528				

Tableau de moyennes pour TCRBV05.1
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	26,657	8,159	3,331
CM+S	5	13,877	4,933	2,206
J3P	4	19,960	14,417	7,208
J3S	4	10,518	3,153	1,577
J4P	7	19,651	14,109	5,333
J4S	6	8,088	1,826	,746
J5P	7	20,393	9,875	3,733
J5S	8	15,429	8,348	2,952
J6P	8	19,805	7,737	2,735
J6S	10	19,787	8,877	2,807
TNP	2	11,334	1,795	1,269
TNS	4	14,094	5,006	2,503

FIG. 61B

Courbe des interactions pour TCRBV05.1
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

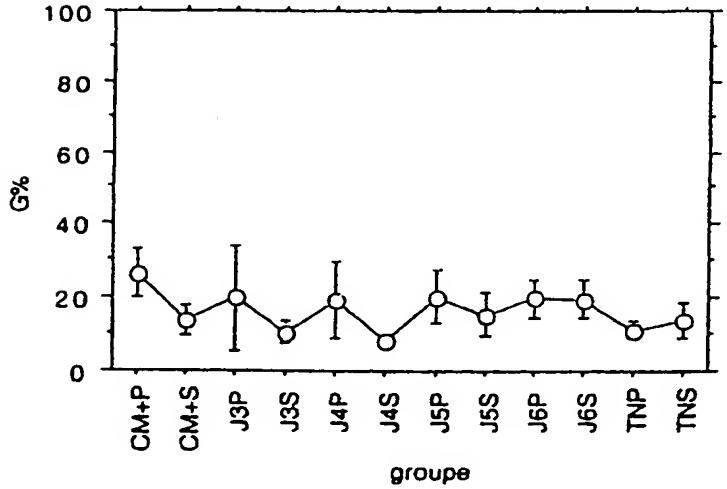


FIG.61C

FIG. 61D

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	12,780	10,669	,0197	S
CM+P, J3P	6,697	11,373	,2434	
CM+P, J3S	16,139	11,373	,0062	S
CM+P, J4P	7,006	9,802	,1579	
CM+P, J4S	18,569	10,172	,0006	S
CM+P, J5P	6,264	9,802	,2060	
CM+P, J5S	11,228	9,515	,0215	S
CM+P, J6P	6,852	9,515	,1549	
CM+P, J6S	6,870	9,098	,1362	
CM+P, TNP	15,323	14,386	,0372	S
CM+P, TNS	12,563	11,373	,0310	S
CM+S, J3P	-6,083	11,819	,3073	
CM+S, J3S	3,359	11,819	,5717	
CM+S, J4P	-5,774	10,316	,2673	
CM+S, J4S	5,789	10,669	,2820	
CM+S, J5P	-6,516	10,316	,2112	
CM+S, J5S	-1,552	10,044	,7582	
CM+S, J6P	-5,928	10,044	,2423	
CM+S, J6S	-5,910	9,650	,2252	
CM+S, TNP	2,543	14,741	,7312	
CM+S, TNS	-,217	11,819	,9709	
J3P, J3S	9,442	12,458	,1347	
J3P, J4P	,310	11,043	,9554	
J3P, J4S	11,872	11,373	,0410	S
J3P, J5P	-,433	11,043	,9378	
J3P, J5S	4,531	10,789	,4041	
J3P, J6P	,155	10,789	,9771	
J3P, J6S	,173	10,423	,9736	
J3P, TNP	8,626	15,258	,2625	
J3P, TNS	5,867	12,458	,3499	
J3S, J4P	-9,133	11,043	,1033	
J3S, J4S	2,430	11,373	,6705	
J3S, J5P	-9,875	11,043	,0787	
J3S, J5S	-4,911	10,789	,3661	
J3S, J6P	-9,287	10,789	,0902	
J3S, J6S	-9,269	10,423	,0803	
J3S, TNP	-,816	15,258	,9151	
J3S, TNS	-3,576	12,458	,5679	
J4P, J4S	11,563	9,802	,0216	S
J4P, J5P	-,742	9,418	,8752	
J4P, J5S	4,221	9,119	,3580	
J4P, J6P	-,155	9,119	,9731	
J4P, J6S	-,137	8,683	,9750	
J4P, TNP	8,317	14,126	,2435	
J4P, TNS	5,557	11,043	,3181	
J4S, J5P	-12,305	9,802	,0148	S
J4S, J5S	-7,341	9,515	,1280	
J4S, J6P	-11,717	9,515	,0167	S
J4S, J6S	-11,700	9,098	,0126	S
J4S, TNP	-3,246	14,386	,6533	
J4S, TNS	-6,006	11,373	,2950	
J5P, J5S	4,964	9,119	,2805	
J5P, J6P	,588	9,119	,8978	
J5P, J6S	,606	8,683	,8894	
J5P, TNP	9,059	14,126	,2044	
J5P, TNS	6,299	11,043	,2583	
J5S, J6P	-4,376	8,809	,3243	
J5S, J6S	-4,358	8,357	,3010	
J5S, TNP	4,095	13,929	,5586	
J5S, TNS	1,336	10,789	,8052	
J6P, J6S	,018	8,357	,9966	
J6P, TNP	8,471	13,929	,2285	
J6P, TNS	5,712	10,789	,2938	
J6S, TNP	8,453	13,647	,2201	
J6S, TNS	5,694	10,423	,2788	
TNP, TNS	-2,760	15,258	,7187	

FIG. 61E

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	1350,634	122,785	6,040	<,0001	66,443	1,000
Résidu	68	1382,288	20,328				

Tableau de moyennes pour TCRBV05.2
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	5	23,300	7,151	3,198
CM+S	7	9,868	4,811	1,818
J3P	5	14,277	8,343	3,731
J3S	4	6,390	1,693	,847
J4P	8	10,889	1,436	,508
J4S	9	8,759	2,111	,704
J5P	8	17,091	3,750	1,326
J5S	10	8,415	6,726	2,127
J6P	8	12,346	3,849	1,361
J6S	10	9,966	2,723	,861
TNP	2	9,361	4,477	3,165
TNS	4	8,400	1,384	,692

FIG. 61F

Courbe des interactions pour TCRBV05.2
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

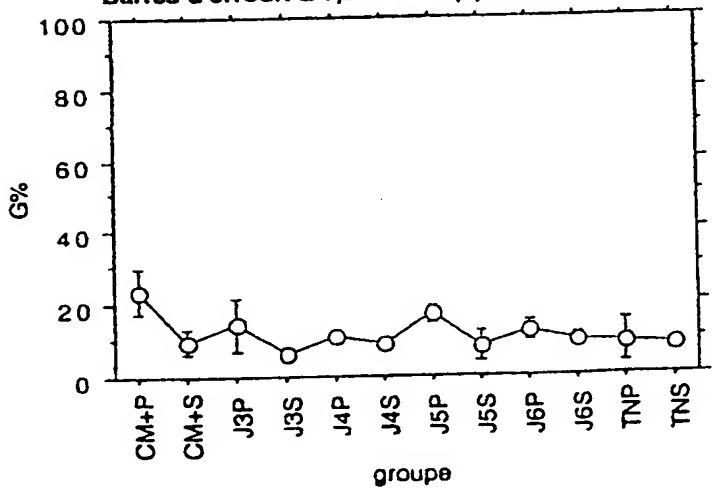


FIG. 61G

FIG. 61 H

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	13,432	5,268	<,0001	S
CM+P, J3P	9,024	5,690	,0023	S
CM+P, J3S	16,910	6,035	<,0001	S
CM+P, J4P	12,411	5,129	<,0001	S
CM+P, J4S	14,541	5,018	<,0001	S
CM+P, J5P	6,209	5,129	,0184	S
CM+P, J5S	14,886	4,928	<,0001	S
CM+P, J6P	10,955	5,129	<,0001	S
CM+P, J6S	13,335	4,928	<,0001	S
CM+P, TNP	13,939	7,527	,0004	S
CM+P, TNS	14,901	6,035	<,0001	S
CM+S, J3P	-4,409	5,268	,0995	
CM+S, J3S	3,478	5,639	,2227	
CM+S, J4P	-1,021	4,656	,6632	
CM+S, J4S	1,109	4,534	,6271	
CM+S, J5P	-7,223	4,656	,0029	S
CM+S, J5S	1,454	4,434	,5152	
CM+S, J6P	-2,477	4,656	,2921	
CM+S, J6S	-,098	4,434	,9651	
CM+S, TNP	,507	7,214	,8888	
CM+S, TNS	1,469	5,639	,6050	
J3P, J3S	7,887	6,035	,0112	S
J3P, J4P	3,388	5,129	,1919	
J3P, J4S	5,518	5,018	,0317	S
J3P, J5P	-2,815	5,129	,2774	
J3P, J5S	5,862	4,928	,0204	S
J3P, J6P	1,931	5,129	,4550	
J3P, J6S	4,311	4,928	,0854	
J3P, TNP	4,916	7,527	,1969	
J3P, TNS	5,877	6,035	,0561	
J3S, J4P	-4,499	5,509	,1078	
J3S, J4S	-2,369	5,406	,3850	
J3S, J5P	-10,701	5,509	,0002	S
J3S, J5S	-2,025	5,323	,4505	
J3S, J6P	-5,956	5,509	,0345	S
J3S, J6S	-3,576	5,323	,1845	
J3S, TNP	-2,971	7,791	,4494	
J3S, TNS	-2,009	6,362	,5306	
J4P, J4S	2,130	4,372	,3344	
J4P, J5P	-6,202	4,498	,0076	S
J4P, J5S	2,474	4,268	,2513	
J4P, J6P	-1,457	4,498	,5203	
J4P, J6S	,923	4,268	,6674	
J4P, TNP	1,528	7,113	,6695	
J4P, TNS	2,489	5,509	,3704	
J4S, J5P	-8,332	4,372	,0003	S
J4S, J5S	,345	4,134	,8684	
J4S, J6P	-3,586	4,372	,1062	
J4S, J6S	-1,207	4,134	,5622	
J4S, TNP	-,602	7,033	,8649	
J4S, TNS	,360	5,406	,8948	
J5P, J5S	8,677	4,268	,0001	S
J5P, J6P	4,746	4,498	,0390	S
J5P, J6S	7,126	4,268	,0014	S
J5P, TNP	7,730	7,113	,0336	S
J5P, TNS	8,692	5,509	,0024	S
J5S, J6P	-3,931	4,268	,0704	
J5S, J6S	-1,551	4,024	,4444	
J5S, TNP	-,946	6,969	,7872	
J5S, TNS	,015	5,323	,9955	
J6P, J6S	2,380	4,268	,2697	
J6P, TNP	2,985	7,113	,4053	
J6P, TNS	3,946	5,509	,1575	
J6S, TNP	,605	6,969	,8630	
J6S, TNS	1,566	5,323	,5590	
TNP, TNS	,961	7,791	,8062	

FIG. 62A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	1291,943	117,449	1,870	,0575	20,575	,837
Résidu	73	4583,735	62,791				

Tableau de moyennes pour TCRBV06
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	15,125	7,023	2,867
CM+S	7	10,994	7,245	2,739
J3P	5	7,344	2,440	1,091
J3S	5	17,100	10,958	4,901
J4P	10	11,019	8,113	2,566
J4S	9	8,340	8,466	2,822
J5P	9	7,467	2,436	,812
J5S	9	10,375	8,168	2,723
J6P	9	18,262	9,736	3,245
J6S	10	15,564	10,507	3,322
TNP	2	6,084	,261	,185
TNS	4	6,845	2,526	1,263

FIG. 62B

Courbe des interactions pour TCRBV06
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

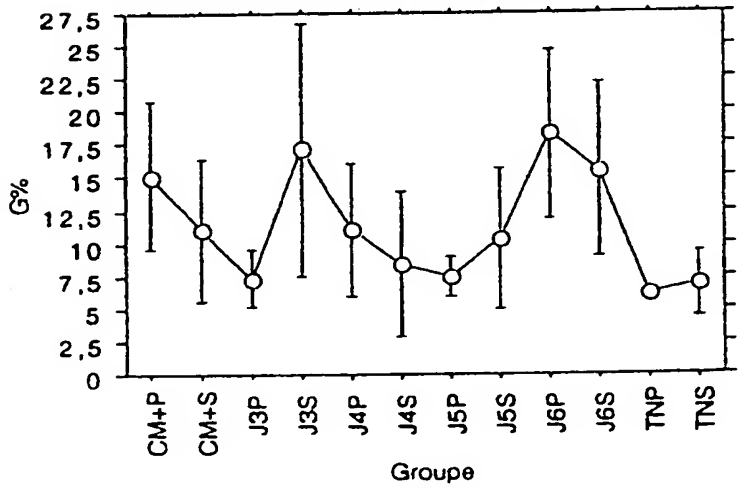


FIG.62C

FIG. 62D

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	4,131	8,786	,3518	
CM+P, J3P	7,781	9,563	,1092	
CM+P, J3S	-1,975	9,563	,6818	
CM+P, J4P	4,106	8,155	,3190	
CM+P, J4S	6,784	8,323	,1086	
CM+P, J5P	7,657	8,323	,0708	
CM+P, J5S	4,749	8,323	,2592	
CM+P, J6P	-3,137	8,323	,4550	
CM+P, J6S	-,440	8,155	,9148	
CM+P, TNP	9,041	12,895	,1665	
CM+P, TNS	8,280	10,194	,1098	
CM+S, J3P	3,650	9,247	,4341	
CM+S, J3S	-6,106	9,247	,1923	
CM+S, J4P	-,025	7,783	,9949	
CM+S, J4S	2,653	7,959	,5085	
CM+S, J5P	3,526	7,959	,3801	
CM+S, J5S	,618	7,959	,8774	
CM+S, J6P	-7,268	7,959	,0728	
CM+S, J6S	-4,571	7,783	,2456	
CM+S, TNP	4,910	12,662	,4421	
CM+S, TNS	4,148	9,899	,4063	
J3P, J3S	-9,756	9,988	,0554	
J3P, J4P	-3,675	8,650	,3999	
J3P, J4S	-,996	8,809	,8223	
J3P, J5P	-,124	8,809	,9778	
J3P, J5S	-3,032	8,809	,4949	
J3P, J6P	-10,918	8,809	,0158	S
J3P, J6S	-8,220	8,650	,0622	
J3P, TNP	1,260	13,213	,8498	
J3P, TNS	,499	10,594	,9255	
J3S, J4P	6,081	8,650	,1654	
J3S, J4S	8,759	8,809	,0513	
J3S, J5P	9,632	8,809	,0325	S
J3S, J5S	6,724	8,809	,1325	
J3S, J6P	-1,162	8,809	,7933	
J3S, J6S	1,536	8,650	,7245	
J3S, TNP	11,016	13,213	,1009	
J3S, TNS	10,255	10,594	,0576	
J4P, J4S	2,678	7,256	,4643	
J4P, J5P	3,551	7,256	,3326	
J4P, J5S	,643	7,256	,8603	
J4P, J6P	-7,243	7,256	,0504	
J4P, J6S	-4,545	7,063	,2037	
J4P, TNP	4,935	12,233	,4240	
J4P, TNS	4,174	9,343	,3762	
J4S, J5P	,873	7,445	,8159	
J4S, J5S	-2,035	7,445	,5875	
J4S, J6P	-9,921	7,445	,0097	S
J4S, J6S	-7,224	7,256	,0510	
J4S, TNP	2,257	12,346	,7167	
J4S, TNS	1,495	9,490	,7544	
J5P, J5S	-2,908	7,445	,4388	
J5P, J6P	-10,794	7,445	,0051	S
J5P, J6S	-8,097	7,256	,0293	S
J5P, TNP	1,384	12,346	,8239	
J5P, TNS	,622	9,490	,8964	
J5S, J6P	-7,886	7,445	,0382	S
J5S, J6S	-5,189	7,256	,1584	
J5S, TNP	4,292	12,346	,4906	
J5S, TNS	3,530	9,490	,4608	
J6P, J6S	2,698	7,256	,4611	
J6P, TNP	12,178	12,346	,0531	
J6P, TNS	11,417	9,490	,0191	S
J6S, TNP	9,480	12,233	,1268	
J6S, TNS	8,719	9,343	,0669	
TNP, TNS	-,761	13,677	,9120	

FIG.62E

	ddl	Somme des carrés	Carre moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	1662,073	151,098	2,273	,0190	24,999	,916
Résidu	73	4853,374	66,485				

Tableau de moyennes pour TCRBV07
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	22,571	12,580	5,136
CM+S	7	12,394	5,957	2,251
J3P	4	8,192	3,515	1,758
J3S	5	18,202	12,455	5,570
J4P	10	9,671	7,238	2,289
J4S	9	7,380	1,678	,559
J5P	9	7,781	3,973	1,324
J5S	10	11,235	7,477	2,365
J6P	9	17,036	11,325	3,775
J6S	10	13,534	9,840	3,112
TNP	2	5,798	1,335	,944
TNS	4	11,232	7,499	3,749

FIG. 62F

Courbe des interactions pour TCRBV07
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

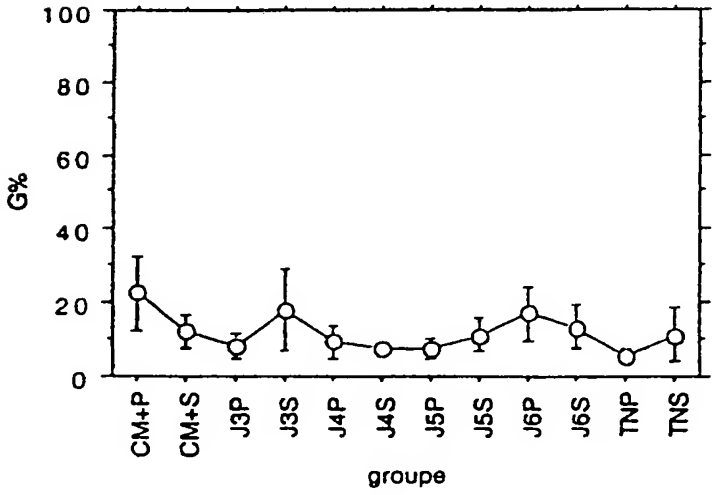


FIG. 62G

FIG. 62 H

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	10,177	9,041	,0279	S
CM+P, J3P	14,380	10,490	,0079	S
CM+P, J3S	4,369	9,840	,3791	
CM+P, J4P	12,900	8,392	,0031	S
CM+P, J4S	15,191	8,565	,0007	S
CM+P, J5P	14,790	8,565	,0010	S
CM+P, J5S	11,336	8,392	,0088	S
CM+P, J6P	5,535	8,565	,2018	
CM+P, J6S	9,037	8,392	,0352	S
CM+P, TNP	16,773	13,268	,0139	S
CM+P, TNS	11,339	10,490	,0345	S
CM+S, J3P	4,202	10,186	,4136	
CM+S, J3S	-5,808	9,515	,2277	
CM+S, J4P	2,723	8,008	,5002	
CM+S, J4S	5,014	8,189	,2263	
CM+S, J5P	4,612	8,189	,2653	
CM+S, J5S	1,159	8,008	,7739	
CM+S, J6P	-4,642	8,189	,2623	
CM+S, J6S	-1,140	8,008	,7775	
CM+S, TNP	6,596	13,029	,3163	
CM+S, TNS	1,162	10,186	,8208	
J3P, J3S	-10,011	10,901	,0713	
J3P, J4P	-1,480	9,614	,7599	
J3P, J4S	,811	9,765	,8689	
J3P, J5P	,410	9,765	,9335	
J3P, J5S	-3,044	9,614	,5301	
J3P, J6P	-8,845	9,765	,0752	
J3P, J6S	-5,342	9,614	,2717	
J3P, TNP	2,394	14,073	,7356	
J3P, TNS	-3,041	11,491	,5995	
J3S, J4P	8,531	8,901	,0600	
J3S, J4S	10,822	9,064	,0200	S
J3S, J5P	10,421	9,064	,0248	S
J3S, J5S	6,967	8,901	,1231	
J3S, J6P	1,166	9,064	,7984	
J3S, J6S	4,668	8,901	,2993	
J3S, TNP	12,404	13,596	,0731	
J3S, TNS	6,970	10,901	,2066	
J4P, J4S	2,291	7,467	,5428	
J4P, J5P	1,890	7,467	,6155	
J4P, J5S	-1,564	7,267	,6693	
J4P, J6P	-7,365	7,467	,0531	
J4P, J6S	-3,863	7,267	,2930	
J4P, TNP	3,873	12,588	,5416	
J4P, TNS	-1,561	9,614	,7472	
J4S, J5P	-,401	7,661	,9171	
J4S, J5S	-3,855	7,467	,3069	
J4S, J6P	-9,656	7,661	,0142	S
J4S, J6S	-6,154	7,467	,1048	
J4S, TNP	1,582	12,704	,8046	
J4S, TNS	-3,852	9,765	,4343	
J5P, J5S	-3,454	7,467	,3598	
J5P, J6P	-9,255	7,661	,0186	S
J5P, J6S	-5,752	7,467	,1290	
J5P, TNP	1,984	12,704	,7565	
J5P, TNS	-3,451	9,765	,4835	
J5S, J6P	-5,801	7,467	,1258	
J5S, J6S	-2,299	7,267	,5304	
J5S, TNP	5,437	12,588	,3921	
J5S, TNS	,003	9,614	,9995	
J6P, J6S	3,502	7,467	,3530	
J6P, TNP	11,238	12,704	,0821	
J6P, TNS	5,804	9,765	,2401	
J6S, TNP	7,736	12,588	,2246	
J6S, TNS	2,302	9,614	,6347	
TNP, TNS	-5,435	14,073	,4440	

FIG. 63A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	460,326	41,848	2,870	,0035	31,573	,973
Résidu	73	1064,330	14,580				

Tableau de moyennes pour TCRBV08.1
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	11,623	5,609	2,290
CM+S	7	8,948	2,515	,950
J3P	5	7,514	1,811	,810
J3S	5	7,790	3,225	1,442
J4P	10	6,330	1,351	,427
J4S	9	4,583	1,739	,580
J5P	9	6,969	1,629	,543
J5S	10	6,622	2,787	,881
J6P	8	9,385	3,428	1,212
J6S	10	11,825	8,039	2,542
TNP	2	6,355	2,775	1,963
TNS	4	4,560	1,918	,959

FIG. 63B

Courbe des interactions pour TCRBV08.1
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

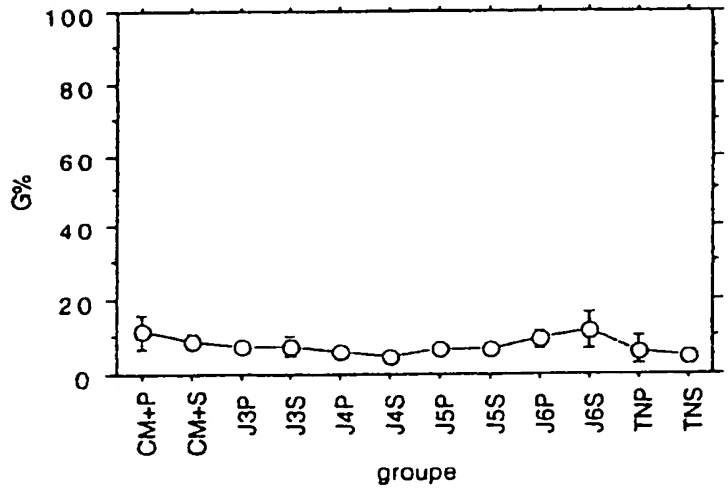


FIG.63C

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	2,675	4,234	,2119	
CM+P, J3P	4,109	4,608	,0797	
CM+P, J3S	3,833	4,608	,1017	
CM+P, J4P	5,293	3,930	,0090	S
CM+P, J4S	7,040	4,011	,0008	S
CM+P, J5P	4,654	4,011	,0236	S
CM+P, J5S	5,001	3,930	,0133	S
CM+P, J6P	2,238	4,110	,2813	
CM+P, J6S	-,202	3,930	,9185	
CM+P, TNP	5,267	6,214	,0954	
CM+P, TNS	7,063	4,912	,0064	S
CM+S, J3P	1,434	4,456	,5234	
CM+S, J3S	1,157	4,456	,6063	
CM+S, J4P	2,618	3,750	,1684	
CM+S, J4S	4,365	3,835	,0263	S
CM+S, J5P	1,979	3,835	,3072	
CM+S, J5S	2,325	3,750	,2205	
CM+S, J6P	-,437	3,939	,8256	
CM+S, J6S	-2,878	3,750	,1305	
CM+S, TNP	2,592	6,102	,3999	
CM+S, TNS	4,388	4,770	,0708	
J3P, J3S	-,276	4,813	,9092	
J3P, J4P	1,184	4,168	,5730	
J3P, J4S	2,931	4,245	,1729	
J3P, J5P	,545	4,245	,7988	
J3P, J5S	,892	4,168	,6711	
J3P, J6P	-1,871	4,338	,3930	
J3P, J6S	-4,311	4,168	,0428	S
J3P, TNP	1,158	6,367	,7179	
J3P, TNS	2,954	5,105	,2525	
J3S, J4P	1,461	4,168	,4872	
J3S, J4S	3,208	4,245	,1363	
J3S, J5P	,821	4,245	,7008	
J3S, J5S	1,168	4,168	,5781	
J3S, J6P	-1,594	4,338	,4663	
J3S, J6S	-4,035	4,168	,0576	
J3S, TNP	1,435	6,367	,6547	
J3S, TNS	3,231	5,105	,2112	
J4P, J4S	1,747	3,497	,3226	
J4P, J5P	-,639	3,497	,7167	
J4P, J5S	-,292	3,403	,8645	
J4P, J6P	-3,055	3,610	,0960	
J4P, J6S	-5,496	3,403	,0019	S
J4P, TNP	-,026	5,895	,9931	
J4P, TNS	1,770	4,502	,4358	
J4S, J5P	-2,386	3,587	,1890	
J4S, J5S	-2,040	3,497	,2488	
J4S, J6P	-4,802	3,698	,0116	S
J4S, J6S	-7,243	3,497	<,0001	S
J4S, TNP	-1,773	5,949	,5544	
J4S, TNS	,023	4,573	,9921	
J5P, J5S	,347	3,497	,8439	
J5P, J6P	-2,416	3,698	,1970	
J5P, J6S	-4,856	3,497	,0071	S
J5P, TNP	,613	5,949	,8377	
J5P, TNS	2,409	4,573	,2972	
J5S, J6P	-2,762	3,610	,1315	
J5S, J6S	-5,203	3,403	,0032	S
J5S, TNP	,267	5,895	,9284	
J5S, TNS	2,063	4,502	,3642	
J6P, J6S	-2,441	3,610	,1820	
J6P, TNP	3,029	6,016	,3190	
J6P, TNS	4,825	4,660	,0426	S
J6S, TNP	5,470	5,895	,0685	
J6S, TNS	7,266	4,502	,0019	S
TNP, TNS	1,796	6,590	,5887	

FIG. 63D

FIG.63E

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	261,752	23,796	,845	,5966	9,294	,423
Résidu	72	2027,752	28,163				

Tableau de moyennes pour TCRBV08.2
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	9,424	4,193	1,712
CM+S	7	9,822	8,175	3,090
J3P	5	7,368	3,371	1,508
J3S	5	11,440	8,893	3,977
J4P	10	7,015	3,452	1,092
J4S	9	5,927	2,128	,709
J5P	8	7,913	2,982	1,054
J5S	10	7,678	4,199	1,328
J6P	8	9,707	5,289	1,870
J6S	10	11,101	8,149	2,577
TNP	2	6,014	1,405	,993
TNS	4	6,761	2,393	1,197

FIG. 63F

Graphique des interactions pour TCRBV08.2
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

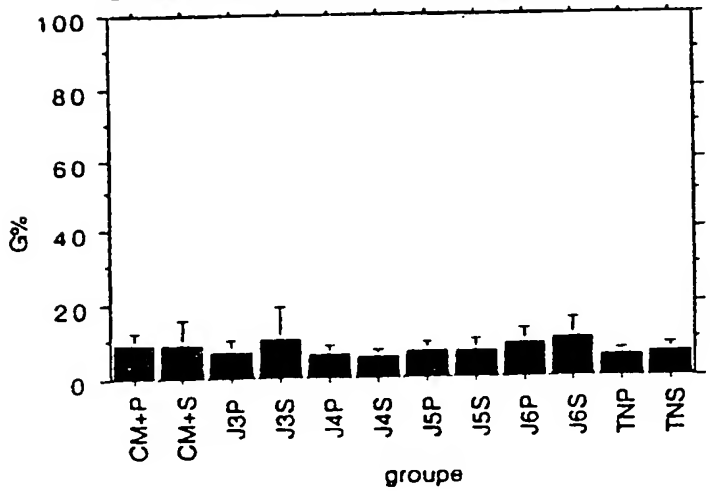


FIG. 63G

FIG. 63 H

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	-,398	5,886	,8933	
CM+P, J3P	2,056	6,406	,5243	
CM+P, J3S	-2,016	6,406	,5325	
CM+P, J4P	2,409	5,463	,3822	
CM+P, J4S	3,497	5,576	,2152	
CM+P, J5P	1,511	5,713	,5996	
CM+P, J5S	1,746	5,463	,5261	
CM+P, J6P	-,283	5,713	,9217	
CM+P, J6S	-1,677	5,463	,5425	
CM+P, TNP	3,410	8,638	,4339	
CM+P, TNS	2,663	6,829	,4395	
CM+S, J3P	2,454	6,194	,4323	
CM+S, J3S	-1,618	6,194	,6042	
CM+S, J4P	2,807	5,213	,2867	
CM+S, J4S	3,895	5,331	,1497	
CM+S, J5P	1,909	5,475	,4893	
CM+S, J5S	2,143	5,213	,4152	
CM+S, J6P	,115	5,475	,9667	
CM+S, J6S	-1,280	5,213	,6262	
CM+S, TNP	3,807	8,482	,3739	
CM+S, TNS	3,060	6,631	,3606	
J3P, J3S	-4,072	6,691	,2290	
J3P, J4P	,353	5,794	,9036	
J3P, J4S	1,441	5,901	,6279	
J3P, J5P	-,545	6,031	,8576	
J3P, J5S	-,310	5,794	,9153	
J3P, J6P	-2,339	6,031	,4420	
J3P, J6S	-3,733	5,794	,2031	
J3P, TNP	1,353	8,851	,7614	
J3P, TNS	,606	7,097	,8652	
J3S, J4P	4,425	5,794	,1323	
J3S, J4S	5,513	5,901	,0666	
J3S, J5P	3,527	6,031	,2475	
J3S, J5S	3,761	5,794	,1998	
J3S, J6P	1,733	6,031	,5686	
J3S, J6S	,338	5,794	,9076	
J3S, TNP	5,425	8,851	,2257	
J3S, TNS	4,678	7,097	,1930	
J4P, J4S	1,088	4,861	,6569	
J4P, J5P	-,898	5,018	,7223	
J4P, J5S	-,664	4,731	,7806	
J4P, J6P	-2,692	5,018	,2884	
J4P, J6S	-4,087	4,731	,0894	
J4P, TNP	1,000	8,195	,8085	
J4P, TNS	,253	6,259	,9360	
J4S, J5P	-1,986	5,141	,4438	
J4S, J5S	-1,751	4,861	,4750	
J4S, J6P	-3,780	5,141	,1471	
J4S, J6S	-5,174	4,861	,0373	S
J4S, TNP	-,087	8,270	,9832	
J4S, TNS	-,835	6,357	,7943	
J5P, J5S	,234	5,018	,9260	
J5P, J6P	-1,794	5,290	,5011	
J5P, J6S	-3,189	5,018	,2094	
J5P, TNP	1,898	8,364	,6523	
J5P, TNS	1,151	6,478	,7242	
J5S, J6P	-2,028	5,018	,4230	
J5S, J6S	-3,423	4,731	,1536	
J5S, TNP	1,664	8,195	,6869	
J5S, TNS	,917	6,259	,7711	
J6P, J6S	-1,394	5,018	,5813	
J6P, TNP	3,692	8,364	,3818	
J6P, TNS	2,945	6,478	,3678	
J6S, TNP	5,087	8,195	,2199	
J6S, TNS	4,340	6,259	,1712	
TNP, TNS	-,747	9,162	,8713	

FIG. 64A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	564,311	51,301	1,738	,0817	19,121	,801
Résidu	73	2154,478	29,513				

Tableau de moyennes pour TCRBV08.3
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	8,649	3,431	1,401
CM+S	7	10,400	7,544	2,851
J3P	5	4,319	1,074	,480
J3S	4	5,041	1,346	,673
J4P	10	5,428	3,063	,969
J4S	9	3,465	1,420	,473
J5P	8	6,072	2,450	,866
J5S	10	3,777	1,722	,545
J6P	10	10,578	12,746	4,031
J6S	10	7,271	3,527	1,115
TNP	2	4,127	,033	,023
TNS	4	3,071	,500	,250

FIG. 64B

Graphique des interactions pour TCRBV08.3
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

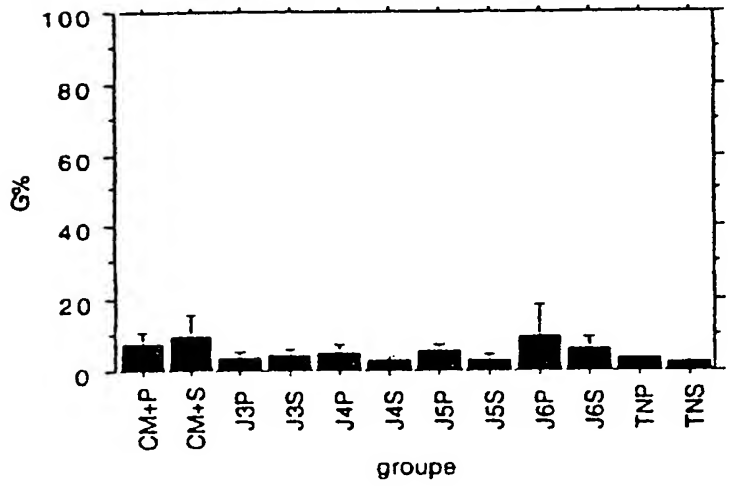


FIG.64C

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	-1,761	6,024	,5641	
CM+P, J3P	4,330	6,556	,1922	
CM+P, J3S	3,608	6,989	,3070	
CM+P, J4P	3,221	5,591	,2547	
CM+P, J4S	5,183	5,706	,0744	
CM+P, J5P	2,577	6,847	,3827	
CM+P, J5S	4,872	5,591	,0867	
CM+P, J6P	-1,930	5,591	,4938	
CM+P, J6S	1,377	5,591	,8249	
CM+P, TNP	4,522	8,840	,3114	
CM+P, TNS	5,578	6,989	,1160	
CM+S, J3P	6,081	6,340	,0598	
CM+S, J3S	5,359	6,786	,1199	
CM+S, J4P	4,972	5,336	,0673	
CM+S, J4S	6,935	5,456	,0135	S
CM+S, J5P	4,328	5,604	,1281	
CM+S, J5S	6,623	5,336	,0157	S
CM+S, J6P	-,178	5,336	,9471	
CM+S, J6S	3,129	5,336	,2463	
CM+S, TNP	6,273	8,681	,1541	
CM+S, TNS	7,329	6,786	,0347	S
J3P, J3S	-,723	7,263	,8434	
J3P, J4P	-1,109	5,930	,7104	
J3P, J4S	,853	6,039	,7790	
J3P, J5P	-1,753	6,172	,5730	
J3P, J5S	,541	5,930	,8561	
J3P, J6P	-6,260	5,930	,0388	S
J3P, J6S	-2,953	5,930	,3243	
J3P, TNP	,192	9,059	,9664	
J3P, TNS	1,248	7,263	,7331	
J3S, J4P	-,387	6,405	,9046	
J3S, J4S	1,576	6,506	,6307	
J3S, J5P	-1,031	6,630	,7575	
J3S, J5S	1,264	6,405	,6952	
J3S, J6P	-5,537	6,405	,0892	
J3S, J6S	-2,230	6,405	,4900	
J3S, TNP	,915	9,377	,8464	
J3S, TNS	1,970	7,656	,6096	
J4P, J4S	1,963	4,975	,4342	
J4P, J5P	-,644	5,136	,8033	
J4P, J5S	1,651	4,842	,4990	
J4P, J6P	-5,150	4,842	,0374	S
J4P, J6S	-1,843	4,842	,4505	
J4P, TNP	1,301	8,387	,7580	
J4P, TNS	2,357	6,405	,4657	
J4S, J5P	-2,607	5,261	,3267	
J4S, J5S	-,312	4,975	,9009	
J4S, J6P	-7,113	4,975	,0057	S
J4S, J6S	-3,806	4,975	,1316	
J4S, TNP	-,661	8,464	,8767	
J4S, TNS	,394	6,506	,9042	
J5P, J5S	2,295	5,136	,3761	
J5P, J6P	-4,506	5,136	,0846	
J5P, J6S	-1,199	5,136	,6431	
J5P, TNP	1,945	8,560	,6519	
J5P, TNS	3,001	6,630	,3700	
J5S, J6P	-6,801	4,842	,0065	S
J5S, J6S	-3,494	4,842	,1547	
J5S, TNP	-,350	8,387	,9340	
J5S, TNS	,706	6,405	,8267	
J6P, J6S	3,307	4,842	,1776	
J6P, TNP	6,452	8,387	,1296	
J6P, TNS	7,507	6,405	,0223	S
J6S, TNP	3,145	8,387	,4573	
J6S, TNS	4,200	6,405	,1954	
TNP, TNS	1,056	9,377	,8231	

FIG. 64D

FIG. 64E

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	2082,438	189,313	2,237	,0239	24,605	,900
Résidu	59	4993,532	84,636				

Tableau de moyennes pour TCRBV09
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	32,449	11,856	4,840
CM+S	4	18,668	12,314	6,157
J3P	5	15,347	3,162	1,414
J3S	3	13,712	6,283	3,628
J4P	9	16,677	7,101	2,367
J4S	6	17,918	9,498	3,878
J5P	7	20,567	6,361	2,404
J5S	8	12,019	10,703	3,784
J6P	9	16,190	10,703	3,568
J6S	9	19,402	10,490	3,497
TNP	2	15,419	,537	,380
TNS	3	7,443	3,207	1,852

FIG. 64F

Graphique des interactions pour TCRBV09
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

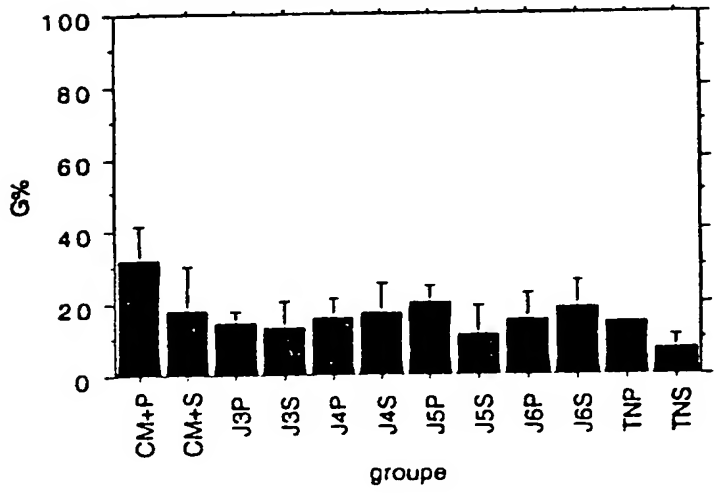


FIG. 64G

FIG. 64 H

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	13,782	11,883	,0238	S
CM+P, J3P	17,102	11,147	,0032	S
CM+P, J3S	18,737	13,017	,0056	S
CM+P, J4P	15,773	9,702	,0019	S
CM+P, J4S	14,532	10,628	,0082	S
CM+P, J5P	11,882	10,242	,0237	S
CM+P, J5S	20,431	9,942	,0001	S
CM+P, J6P	16,260	9,702	,0014	S
CM+P, J6S	13,047	9,702	,0093	S
CM+P, TNP	17,030	15,031	,0271	S
CM+P, TNS	25,006	13,017	,0003	S
CM+S, J3P	3,321	12,349	,5926	
CM+S, J3S	4,956	14,060	,4834	
CM+S, J4P	1,991	11,062	,7200	
CM+S, J4S	,750	11,883	,8999	
CM+S, J5P	-1,899	11,538	,7430	
CM+S, J5S	6,649	11,273	,2426	
CM+S, J6P	2,478	11,062	,6556	
CM+S, J6S	-,734	11,062	,8948	
CM+S, TNP	3,248	15,942	,6850	
CM+S, TNS	11,224	14,060	,1155	
J3P, J3S	1,635	13,444	,8086	
J3P, J4P	-1,329	10,268	,7965	
J3P, J4S	-2,570	11,147	,6462	
J3P, J5P	-5,220	10,779	,3365	
J3P, J5S	3,329	10,495	,5281	
J3P, J6P	-,842	10,268	,8702	
J3P, J6S	-4,055	10,268	,4326	
J3P, TNP	-,072	15,402	,9925	
J3P, TNS	7,904	13,444	,2442	
J3S, J4P	-2,965	12,272	,6306	
J3S, J4S	-4,206	13,017	,5205	
J3S, J5P	-6,855	12,703	,2846	
J3S, J5S	1,694	12,463	,7866	
J3S, J6P	-2,478	12,272	,6877	
J3S, J6S	-5,690	12,272	,3573	
J3S, TNP	-1,707	16,805	,8396	
J3S, TNS	6,269	15,031	,4073	
J4P, J4S	-1,241	9,702	,7989	
J4P, J5P	-3,890	9,277	,4048	
J4P, J5S	4,658	8,945	,3017	
J4P, J6P	,487	8,678	,9110	
J4P, J6S	-2,726	8,678	,5321	
J4P, TNP	1,257	14,391	,8618	
J4P, TNS	9,233	12,272	,1375	
J4S, J5P	-2,649	10,242	,6067	
J4S, J5S	5,899	9,942	,2399	
J4S, J6P	1,728	9,702	,7228	
J4S, J6S	-1,484	9,702	,7606	
J4S, TNP	2,498	15,031	,7406	
J4S, TNS	10,474	13,017	,1127	
J5P, J5S	8,549	9,527	,0777	
J5P, J6P	4,377	9,277	,3489	
J5P, J6S	1,165	9,277	,8025	
J5P, TNP	5,148	14,760	,4880	
J5P, TNS	13,124	12,703	,0431	S
J5S, J6P	-4,171	8,945	,3546	
J5S, J6S	-7,384	8,945	,1039	
J5S, TNP	-3,401	14,553	,6418	
J5S, TNS	4,575	12,463	,4655	
J6P, J6S	-3,213	8,678	,4618	
J6P, TNP	,770	14,391	,9151	
J6P, TNS	8,746	12,272	,1591	
J6S, TNP	3,983	14,391	,5818	
J6S, TNS	11,959	12,272	,0560	
TNP, TNS	7,976	16,805	,3461	

FIG. 65A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	490,945	44,631	,454	,9251	4,991	,223
Résidu	71	6984,585	98,374				

Tableau de moyennes pour TCRBV10
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	10,175	3,320	1,355
CM+S	7	7,994	3,656	1,382
J3P	5	9,884	9,834	4,398
J3S	5	8,409	7,889	3,528
J4P	9	8,062	7,645	2,548
J4S	9	5,909	1,975	,658
J5P	9	7,336	6,956	2,319
J5S	9	9,596	8,867	2,956
J6P	10	14,088	22,489	7,112
J6S	9	9,281	4,212	1,404
TNP	2	6,434	1,017	,719
TNS	3	3,943	1,407	,812

FIG. 65B

Graphique des interactions pour TCRBV10
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

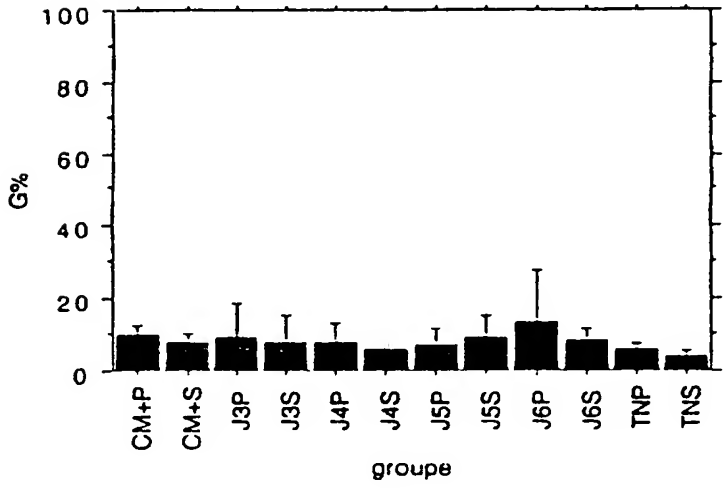


FIG.65C

FIG. 65D

	Diff. moy.	Diff. crit.	Valeur p
CM+P, CM+S	2,180	11,003	,6939
CM+P, J3P	,291	11,975	,9615
CM+P, J3S	1,766	11,975	,7696
CM+P, J4P	2,113	10,423	,6873
CM+P, J4S	4,266	10,423	,4172
CM+P, J5P	2,638	10,423	,5886
CM+P, J5S	,579	10,423	,9122
CM+P, J6P	-3,913	10,213	,4474
CM+P, J6S	,894	10,423	,8647
CM+P, TNP	3,741	16,148	,6456
CM+P, TNS	6,232	13,984	,3772
CM+S, J3P	-1,890	11,580	,7459
CM+S, J3S	-,415	11,580	,9433
CM+S, J4P	-,067	9,967	,9893
CM+S, J4S	2,086	9,967	,6778
CM+S, J5P	,658	9,967	,8956
CM+S, J5S	-1,602	9,967	,7496
CM+S, J6P	-6,093	9,746	,2166
CM+S, J6S	-1,286	9,967	,7977
CM+S, TNP	1,560	15,857	,6450
CM+S, TNS	4,052	13,647	,5557
J3P, J3S	1,475	12,508	,8148
J3P, J4P	1,822	11,031	,7428
J3P, J4S	3,975	11,031	,4748
J3P, J5P	2,548	11,031	,6465
J3P, J5S	,288	11,031	,9586
J3P, J6P	-4,204	10,832	,4416
J3P, J6S	,603	11,031	,9135
J3P, TNP	3,450	16,546	,6789
J3P, TNS	5,941	14,443	,4148
J3S, J4P	,347	11,031	,9501
J3S, J4S	2,500	11,031	,6527
J3S, J5P	1,073	11,031	,8468
J3S, J5S	-1,187	11,031	,8307
J3S, J6P	-5,679	10,832	,2994
J3S, J6S	-,872	11,031	,8752
J3S, TNP	1,975	16,546	,8126
J3S, TNS	4,466	14,443	,5395
J4P, J4S	2,153	9,323	,6466
J4P, J5P	,726	9,323	,8771
J4P, J5S	-1,534	9,323	,7438
J4P, J6P	-6,026	9,087	,1903
J4P, J6S	-1,219	9,323	,7951
J4P, TNP	1,628	15,460	,8343
J4P, TNS	4,119	13,184	,5353
J4S, J5P	-1,427	9,323	,7610
J4S, J5S	-3,687	9,323	,4330
J4S, J6P	-8,179	9,087	,0770
J4S, J6S	-3,372	9,323	,4732
J4S, TNP	-,525	15,460	,9462
J4S, TNS	1,966	13,184	,7671
J5P, J5S	-2,260	9,323	,6304
J5P, J6P	-6,751	9,087	,1429
J5P, J6S	-1,944	9,323	,6788
J5P, TNP	,902	15,460	,9077
J5P, TNS	3,394	13,184	,6094
J5S, J6P	-4,492	9,087	,3277
J5S, J6S	,315	9,323	,9464
J5S, TNP	3,162	15,460	,6847
J5S, TNS	5,653	13,184	,3954
J6P, J6S	4,807	9,087	,2951
J6P, TNP	7,653	15,319	,3225
J6P, TNS	10,145	13,019	,1247
J6S, TNP	2,847	15,460	,7146
J6S, TNS	5,338	13,184	,4222
TNP, TNS	2,492	18,054	,7840

FIG.65E

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	417,530	37,957	1,770	,0767	19,473	,806
Résidu	68	1458,032	21,442				

Tableau de moyennes pour TCRBV11
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	16,209	6,803	2,777
CM+S	7	11,705	4,930	1,863
J3P	5	8,778	4,081	1,825
J3S	5	10,993	6,723	3,007
J4P	9	9,435	5,363	1,788
J4S	8	9,870	4,441	1,570
J5P	8	8,500	2,323	,821
J5S	9	10,472	3,326	1,109
J6P	9	13,144	4,194	1,398
J6S	9	11,466	4,765	1,588
TNP	2	7,048	3,828	2,707
TNS	3	6,057	1,005	,580

FIG. 65F

Graphique des Interactions pour TCRBV11
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

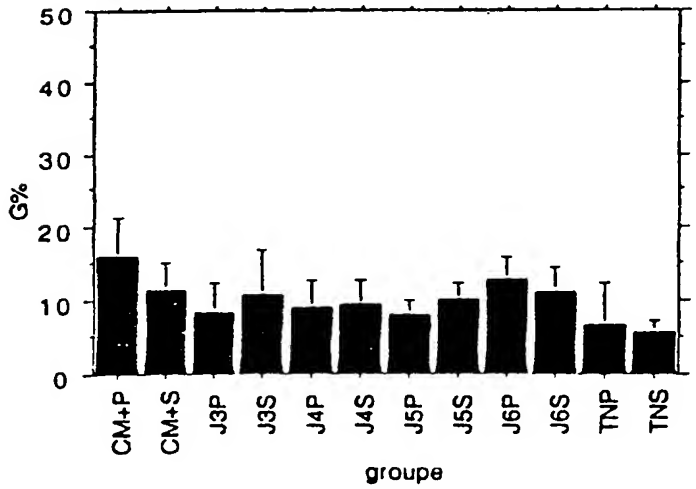


FIG. 65G

FIG. 65 H

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	4,504	5,141	,0849	
CM+P, J3P	7,432	5,595	,0100	S
CM+P, J3S	5,216	5,595	,0672	
CM+P, J4P	6,775	4,870	,0071	S
CM+P, J4S	6,339	4,990	,0136	S
CM+P, J5P	7,709	4,990	,0030	S
CM+P, J5S	5,737	4,870	,0216	S
CM+P, J6P	3,066	4,870	,2134	
CM+P, J6S	4,743	4,870	,0561	
CM+P, TNP	9,162	7,544	,0181	S
CM+P, TNS	10,152	6,534	,0028	S
CM+S, J3P	2,927	5,410	,2841	
CM+S, J3S	,712	5,410	,7937	
CM+S, J4P	2,270	4,657	,3340	
CM+S, J4S	1,835	4,782	,4466	
CM+S, J5P	3,205	4,782	,1855	
CM+S, J5S	1,233	4,657	,5990	
CM+S, J6P	-1,439	4,657	,5396	
CM+S, J6S	,239	4,657	,9187	
CM+S, TNP	4,657	7,409	,2140	
CM+S, TNS	5,648	6,376	,0816	
J3P, J3S	-2,216	5,844	,4519	
J3P, J4P	-,657	5,154	,8000	
J3P, J4S	-1,093	5,268	,6802	
J3P, J5P	,278	5,268	,9165	
J3P, J5S	-1,695	5,154	,5139	
J3P, J6P	-4,366	5,154	,0955	
J3P, J6S	-2,688	5,154	,3016	
J3P, TNP	1,730	7,731	,6566	
J3P, TNS	2,720	6,748	,4239	
J3S, J4P	1,559	5,154	,5482	
J3S, J4S	1,123	5,268	,6719	
J3S, J5P	2,493	5,268	,3483	
J3S, J5S	,521	5,154	,8407	
J3S, J6P	-2,150	5,154	,4080	
J3S, J6S	-,473	5,154	,8553	
J3S, TNP	3,946	7,731	,3121	
J3S, TNS	4,936	6,748	,1490	
J4P, J4S	-,436	4,490	,8470	
J4P, J5P	,935	4,490	,6792	
J4P, J5S	-1,038	4,356	,6360	
J4P, J6P	-3,709	4,356	,0938	
J4P, J6S	-2,031	4,356	,3554	
J4P, TNP	2,387	7,223	,5119	
J4P, TNS	3,377	6,160	,2778	
J4S, J5P	1,370	4,620	,5559	
J4S, J5S	-,602	4,490	,7899	
J4S, J6P	-3,273	4,490	,1503	
J4S, J6S	-1,596	4,490	,4807	
J4S, TNP	2,823	7,305	,4433	
J4S, TNS	3,813	6,256	,2280	
J5P, J5S	-1,972	4,490	,3838	
J5P, J6P	-4,644	4,490	,0428	S
J5P, J6S	-2,966	4,490	,1919	
J5P, TNP	1,452	7,305	,6928	
J5P, TNS	2,443	6,256	,4385	
J5S, J6P	-2,671	4,356	,2252	
J5S, J6S	-,994	4,356	,6504	
J5S, TNP	3,425	7,223	,3475	
J5S, TNS	4,416	6,160	,1572	
J6P, J6S	1,678	4,356	,4448	
J6P, TNP	6,096	7,223	,0968	
J6P, TNS	7,087	6,160	,0248	S
J6S, TNP	4,418	7,223	,2265	
J6S, TNS	5,409	6,160	,0843	
TNP, TNS	,990	8,435	,8154	

FIG. 66A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	847,506	77,046	1,734	,0835	19,078	,797
Résidu	70	3109,660	44,424				

Tableau de moyennes pour TCRBV12
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	5	31,373	13,011	5,819
CM+S	7	23,583	6,355	2,402
J3P	5	16,521	4,564	2,041
J3S	5	22,474	7,502	3,355
J4P	10	20,547	4,914	1,554
J4S	8	20,444	3,354	1,186
J5P	9	21,202	7,031	2,344
J5S	10	20,410	3,361	1,063
J6P	8	23,789	7,661	2,709
J6S	9	19,862	4,989	1,663
TNP	2	21,202	1,749	1,237
TNS	4	27,005	12,590	6,295

FIG. 66B

Graphique des interactions pour TCRBV12
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

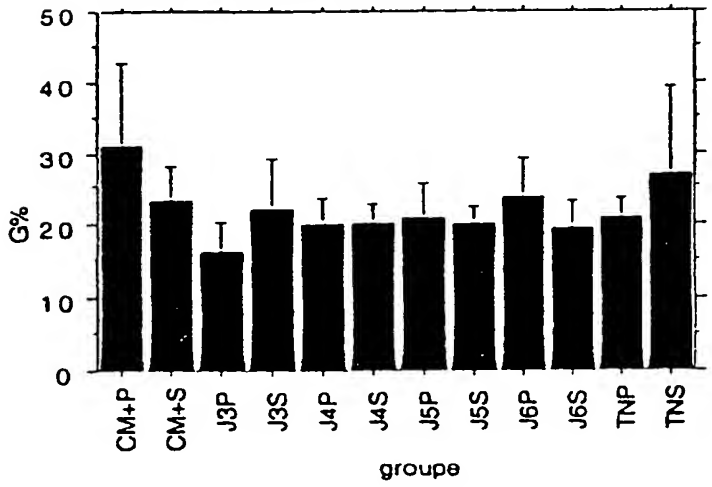


FIG.66C

FIG. 66D

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	7,790	7,784	,0498	S
CM+P, J3P	14,851	8,407	,0008	S
CM+P, J3S	8,899	8,407	,0383	S
CM+P, J4P	10,825	7,281	,0041	S
CM+P, J4S	10,928	7,578	,0053	S
CM+P, J5P	10,170	7,415	,0079	S
CM+P, J5S	10,963	7,281	,0037	S
CM+P, J6P	7,584	7,578	,0498	S
CM+P, J6S	11,511	7,415	,0028	S
CM+P, TNP	10,171	11,122	,0724	
CM+P, TNS	4,368	8,917	,3320	
CM+S, J3P	7,062	7,784	,0747	
CM+S, J3S	1,109	7,784	,7770	
CM+S, J4P	3,036	6,551	,3586	
CM+S, J4S	3,139	6,880	,3660	
CM+S, J5P	2,381	6,699	,4808	
CM+S, J5S	3,173	6,551	,3374	
CM+S, J6P	-,206	6,880	,9525	
CM+S, J6S	3,721	6,699	,2718	
CM+S, TNP	2,381	10,658	,6573	
CM+S, TNS	-3,422	8,332	,4155	
J3P, J3S	-5,952	8,407	,1624	
J3P, J4P	-4,026	7,281	,2739	
J3P, J4S	-3,923	7,578	,3054	
J3P, J5P	-4,681	7,415	,2122	
J3P, J5S	-3,889	7,281	,2904	
J3P, J6P	-7,268	7,578	,0599	
J3P, J6S	-3,341	7,415	,3719	
J3P, TNP	-4,680	11,122	,4041	
J3P, TNS	-10,484	8,917	,0219	S
J3S, J4P	1,926	7,281	,5994	
J3S, J4S	2,029	7,578	,5950	
J3S, J5P	1,271	7,415	,7334	
J3S, J5S	2,063	7,281	,5737	
J3S, J6P	-1,316	7,578	,7302	
J3S, J6S	2,611	7,415	,4847	
J3S, TNP	1,272	11,122	,8203	
J3S, TNS	-4,532	8,917	,3143	
J4P, J4S	,103	6,305	,9741	
J4P, J5P	-,655	6,108	,8313	
J4P, J5S	,137	5,945	,9634	
J4P, J6P	-3,242	6,305	,3087	
J4P, J6S	,685	6,108	,8236	
J4P, TNP	-,654	10,297	,8995	
J4P, TNS	-6,458	7,864	,1060	
J4S, J5P	-,758	6,459	,8156	
J4S, J5S	,034	6,305	,9914	
J4S, J6P	-3,345	6,647	,3190	
J4S, J6S	,582	6,459	,8579	
J4S, TNP	-,757	10,509	,8861	
J4S, TNS	-6,561	8,140	,1125	
J5P, J5S	,792	6,108	,7966	
J5P, J6P	-2,587	6,459	,4271	
J5P, J6S	1,340	6,266	,6710	
J5P, TNP	,001	10,392	>,9999	
J5P, TNS	-5,803	7,988	,1519	
J5S, J6P	-3,379	6,305	,2888	
J5S, J6S	,548	6,108	,8585	
J5S, TNP	-,792	10,297	,8786	
J5S, TNS	-6,595	7,864	,0989	
J6P, J6S	3,927	6,459	,2294	
J6P, TNP	2,587	10,509	,6249	
J6P, TNS	-3,216	8,140	,4334	
J6S, TNP	-1,340	10,392	,7979	
J6S, TNS	-7,143	7,988	,0789	
TNP, TNS	-5,803	11,512	,3182	

FIG.66E

	ddl	Somme des carres	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	569,770	51,797	1,658	,1019	18,243	,773
Résidu	69	2155,053	31,233				

Tableau de moyennes pour TCRBV13
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	16,053	8,177	3,338
CM+S	7	9,454	2,239	,846
J3P	5	12,093	11,473	5,131
J3S	4	7,463	2,623	1,312
J4P	9	8,545	3,606	1,202
J4S	9	8,837	4,734	1,578
J5P	9	12,000	6,015	2,005
J5S	8	11,132	5,742	2,030
J6P	8	10,075	3,850	1,361
J6S	10	9,057	3,207	1,014
TNP	2	16,242	15,161	10,720
TNS	4	4,103	2,133	1,067

FIG. 66F

Graphique des interactions pour TCRBV13
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

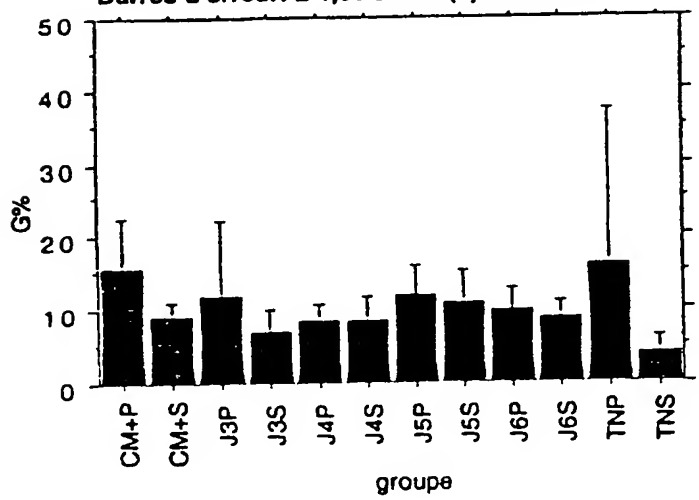


FIG. 66G

FIG. 66 H

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	6,600	6,203	,0374	S
CM+P, J3P	3,960	6,751	,2459	
CM+P, J3S	8,590	7,197	,0200	S
CM+P, J4P	7,508	5,876	,0130	S
CM+P, J4S	7,216	5,876	,0168	S
CM+P, J5P	4,053	5,876	,1733	
CM+P, J5S	4,921	6,021	,1076	
CM+P, J6P	5,978	6,021	,0516	
CM+P, J6S	6,996	5,757	,0180	S
CM+P, TNP	-,189	9,103	,9670	
CM+P, TNS	11,951	7,197	,0015	S
CM+S, J3P	-2,640	6,528	,4227	
CM+S, J3S	1,991	6,988	,5717	
CM+S, J4P	,909	5,619	,7479	
CM+S, J4S	,616	5,619	,8274	
CM+S, J5P	-2,547	5,619	,3690	
CM+S, J5S	-1,679	5,770	,5635	
CM+S, J6P	-,621	5,770	,8305	
CM+S, J6S	,396	5,494	,8860	
CM+S, TNP	-6,789	8,939	,1343	
CM+S, TNS	5,351	6,988	,1312	
J3P, J3S	4,630	7,479	,2210	
J3P, J4P	3,548	6,219	,2589	
J3P, J4S	3,256	6,219	,2999	
J3P, J5P	,093	6,219	,9763	
J3P, J5S	,961	6,356	,7639	
J3P, J6P	2,018	6,356	,5286	
J3P, J6S	3,036	6,107	,3247	
J3P, TNP	-4,149	9,328	,3779	
J3P, TNS	7,991	7,479	,0366	S
J3S, J4P	-1,082	6,700	,7483	
J3S, J4S	-1,374	6,700	,6837	
J3S, J5P	-4,537	6,700	,1811	
J3S, J5S	-3,669	6,827	,2874	
J3S, J6P	-2,612	6,827	,4479	
J3S, J6S	-1,594	6,596	,6312	
J3S, TNP	-8,779	9,655	,0740	
J3S, TNS	3,360	7,884	,3981	
J4P, J4S	-,292	5,256	,9120	
J4P, J5P	-3,456	5,256	,1940	
J4P, J5S	-2,588	5,417	,3440	
J4P, J6P	-1,530	5,417	,5749	
J4P, J6S	-,512	5,123	,8425	
J4P, TNP	-7,698	8,716	,0825	
J4P, TNS	4,442	6,700	,1903	
J4S, J5P	-3,163	5,256	,2340	
J4S, J5S	-2,295	5,417	,4009	
J4S, J6P	-1,238	5,417	,6499	
J4S, J6S	-,220	5,123	,9320	
J4S, TNP	-7,405	8,716	,0946	
J4S, TNS	4,735	6,700	,1631	
J5P, J5S	,868	5,417	,7502	
J5P, J6P	1,925	5,417	,4807	
J5P, J6S	2,943	5,123	,2557	
J5P, TNP	-4,242	8,716	,3349	
J5P, TNS	7,898	6,700	,0215	S
J5S, J6P	1,057	5,574	,7063	
J5S, J6S	2,075	5,288	,4364	
J5S, TNP	-5,110	8,814	,2514	
J5S, TNS	7,030	6,827	,0436	S
J6P, J6S	1,018	5,288	,7022	
J6P, TNP	-6,167	8,814	,1672	
J6P, TNS	5,973	6,827	,0854	
J6S, TNP	-7,185	8,636	,1015	
J6S, TNS	4,955	6,596	,1386	
TNP, TNS	12,140	9,655	,0145	S

FIG. 67A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	231,107	21,010	1,322	,2319	14,537	,647
Résidu	68	1081,036	15,898				

Tableau de moyennes pour TCRBV14
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	10,551	5,149	2,102
CM+S	7	7,043	1,990	,752
J3P	5	4,884	1,269	,567
J3S	4	4,908	2,004	1,002
J4P	9	6,371	3,227	1,076
J4S	9	5,163	2,562	,854
J5P	8	6,045	1,246	,440
J5S	9	5,140	1,601	,534
J6P	9	8,980	8,696	2,899
J6S	8	7,619	4,177	1,477
TNP	2	5,030	,384	,271
TNS	4	5,486	1,990	,995

FIG. 67B

Graphique des interactions pour TCRBV14
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

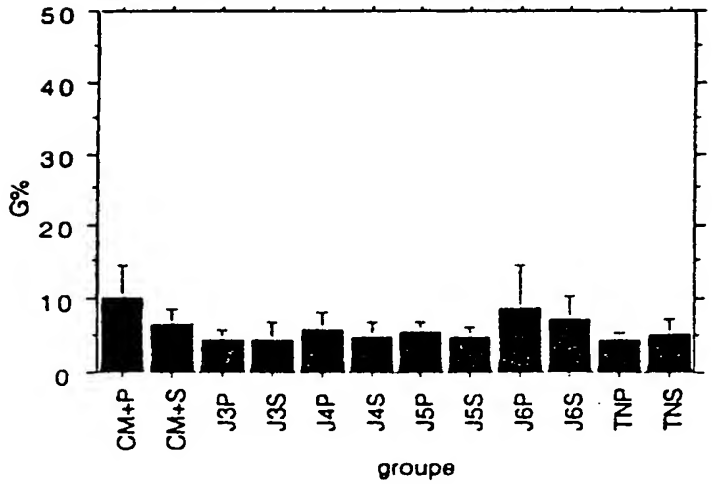


FIG.67C

FIG. 67D

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	3,508	4,426	,1184	
CM+P, J3P	5,668	4,818	,0218	S
CM+P, J3S	5,643	5,136	,0318	S
CM+P, J4P	4,180	4,193	,0507	
CM+P, J4S	5,388	4,193	,0126	S
CM+P, J5P	4,506	4,297	,0401	S
CM+P, J5S	5,411	4,193	,0122	S
CM+P, J6P	1,571	4,193	,4573	
CM+P, J6S	2,932	4,297	,1778	
CM+P, TNP	5,521	6,496	,0945	
CM+P, TNS	5,066	5,136	,0631	
CM+S, J3P	2,160	4,659	,3582	
CM+S, J3S	2,135	4,987	,3959	
CM+S, J4P	,673	4,010	,7389	
CM+S, J4S	1,880	4,010	,3527	
CM+S, J5P	,998	4,118	,6300	
CM+S, J5S	1,903	4,010	,3469	
CM+S, J6P	-1,937	4,010	,3385	
CM+S, J6S	-,576	4,118	,7810	
CM+S, TNP	2,013	6,379	,5310	
CM+S, TNS	1,558	4,987	,5351	
J3P, J3S	-,025	5,337	,9926	
J3P, J4P	-1,487	4,438	,5059	
J3P, J4S	-,280	4,438	,9003	
J3P, J5P	-1,161	4,536	,6111	
J3P, J5S	-,256	4,438	,9085	
J3P, J6P	-4,097	4,438	,0698	
J3P, J6S	-2,736	4,536	,2329	
J3P, TNP	-,147	6,657	,9651	
J3P, TNS	-,602	5,337	,8226	
J3S, J4P	-1,462	4,781	,5436	
J3S, J4S	-,255	4,781	,9156	
J3S, J5P	-1,137	4,872	,6431	
J3S, J5S	-,232	4,781	,9233	
J3S, J6P	-4,072	4,781	,0938	
J3S, J6S	-2,711	4,872	,2708	
J3S, TNP	-,122	6,890	,9720	
J3S, TNS	-,577	5,626	,8364	
J4P, J4S	1,208	3,751	,5227	
J4P, J5P	,326	3,866	,8669	
J4P, J5S	1,231	3,751	,5148	
J4P, J6P	-2,609	3,751	,1696	
J4P, J6S	-1,248	3,866	,5215	
J4P, TNP	1,341	6,220	,6685	
J4P, TNS	,885	4,781	,7129	
J4S, J5P	-,882	3,866	,6505	
J4S, J5S	,023	3,751	,9902	
J4S, J6P	-3,817	3,751	,0462	S
J4S, J6S	-2,456	3,866	,2092	
J4S, TNP	,133	6,220	,9661	
J4S, TNS	-,322	4,781	,8934	
J5P, J5S	,905	3,866	,6420	
J5P, J6P	-2,935	3,866	,1344	
J5P, J6S	-1,574	3,978	,4324	
J5P, TNP	1,015	6,290	,7485	
J5P, TNS	,559	4,872	,8194	
J5S, J6P	-3,840	3,751	,0449	S
J5S, J6S	-2,479	3,866	,2050	
J5S, TNP	,110	6,220	,9720	
J5S, TNS	-,345	4,781	,8858	
J6P, J6S	1,361	3,866	,4848	
J6P, TNP	3,950	6,220	,2094	
J6P, TNS	3,495	4,781	,1493	
J6S, TNP	2,589	6,290	,4143	
J6S, TNS	2,134	4,872	,3852	
TNP, TNS	-,455	6,890	,8955	

FIG.67E

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	475,725	43,248	2,120	,0299	23,320	,888
Résidu	69	1407,598	20,400				

Tableau de moyennes pour TCRBV15
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	12,587	5,913	2,414
CM+S	7	6,161	3,839	1,451
J3P	5	6,724	2,971	1,328
J3S	4	3,964	,921	,460
J4P	10	5,431	1,557	,492
J4S	9	5,088	2,335	,778
J5P	7	5,730	1,647	,622
J5S	10	5,626	1,858	,587
J6P	7	9,920	8,566	3,238
J6S	10	9,571	7,765	2,456
TNP	2	4,499	1,572	1,112
TNS	4	4,683	1,664	,832

FIG. 67F

Graphique des interactions pour TCRBV15
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

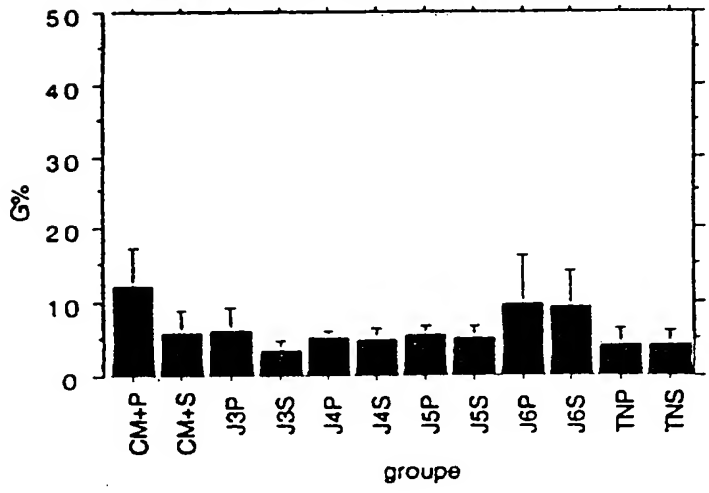


FIG. 67G

FIG. 67 H

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	6,426	5,013	,0128	S
CM+P, J3P	5,863	5,456	,0356	S
CM+P, J3S	8,623	5,816	,0042	S
CM+P, J4P	7,156	4,653	,0031	S
CM+P, J4S	7,498	4,749	,0024	S
CM+P, J5P	6,857	5,013	,0081	S
CM+P, J5S	6,961	4,653	,0039	S
CM+P, J6P	2,667	5,013	,2922	
CM+P, J6S	3,016	4,653	,2003	
CM+P, TNP	6,068	7,357	,0317	S
CM+P, TNS	7,904	5,816	,0085	S
CM+S, J3P	-,562	5,276	,8322	
CM+S, J3S	2,198	5,648	,4403	
CM+S, J4P	,730	4,440	,7439	
CM+S, J4S	1,073	4,541	,6388	
CM+S, J5P	,431	4,816	,8587	
CM+S, J5S	,535	4,440	,8107	
CM+S, J6P	-3,758	4,816	,1241	
CM+S, J6S	-3,409	4,440	,1302	
CM+S, TNP	1,662	7,224	,6477	
CM+S, TNS	1,478	5,648	,6033	
J3P, J3S	2,760	6,044	,3655	
J3P, J4P	1,292	4,935	,6030	
J3P, J4S	1,635	5,026	,5184	
J3P, J5P	,994	5,276	,7082	
J3P, J5S	1,098	4,935	,6587	
J3P, J6P	-3,196	5,276	,2310	
J3P, J6S	-2,847	4,935	,2538	
J3P, TNP	2,225	7,539	,5580	
J3P, TNS	2,041	6,044	,5029	
J3S, J4P	-1,468	5,331	,5846	
J3S, J4S	-1,125	5,415	,6799	
J3S, J5P	-1,766	5,648	,5348	
J3S, J5S	-1,662	5,331	,5359	
J3S, J6P	-5,956	5,648	,0390	S
J3S, J6S	-5,607	5,331	,0395	S
J3S, TNP	-,535	7,803	,8915	
J3S, TNS	-,719	6,371	,8224	
J4P, J4S	,343	4,140	,8692	
J4P, J5P	-,299	4,440	,8937	
J4P, J5S	-,195	4,030	,9234	
J4P, J6P	-4,488	4,440	,0476	S
J4P, J6S	-4,139	4,030	,0442	S
J4P, TNP	,932	6,979	,7907	
J4P, TNS	,748	5,331	,7803	
J4S, J5P	-,642	4,541	,7789	
J4S, J5S	-,538	4,140	,7963	
J4S, J6P	-4,831	4,541	,0374	S
J4S, J6S	-4,482	4,140	,0343	S
J4S, TNP	,589	7,044	,8680	
J4S, TNS	,405	5,415	,8818	
J5P, J5S	,104	4,440	,9630	
J5P, J6P	-4,190	4,816	,0871	
J5P, J6S	-3,841	4,440	,0889	
J5P, TNP	1,231	7,224	,7350	
J5P, TNS	1,047	5,648	,7127	
J5S, J6P	-4,293	4,440	,0579	
J5S, J6S	-3,944	4,030	,0549	
J5S, TNP	1,127	6,979	,7483	
J5S, TNS	,943	5,331	,7252	
J6P, J6S	,349	4,440	,8759	
J6P, TNP	5,420	7,224	,1390	
J6P, TNS	5,236	5,648	,0686	
J6S, TNP	5,071	6,979	,1517	
J6S, TNS	4,887	5,331	,0717	
TNP, TNS	-,184	7,803	,9626	

FIG. 68A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	1108,367	100,761	2,419	,0129	26,609	,934
Résidu	71	2957,431	41,654				

Tableau de moyennes pour TCRBV16
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	6	17,638	6,182	2,524
CM+S	7	9,511	1,933	,731
J3P	5	6,405	2,491	1,114
J3S	4	6,253	1,812	,906
J4P	9	6,565	1,382	,461
J4S	9	5,835	1,449	,483
J5P	9	8,828	4,243	1,414
J5S	10	11,179	11,924	3,771
J6P	9	13,766	7,046	2,349
J6S	10	13,173	9,708	3,070
TNP	2	5,439	1,203	,851
TNS	3	4,811	1,861	1,075

FIG. 68B

Graphique des interactions pour TCRBV16
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

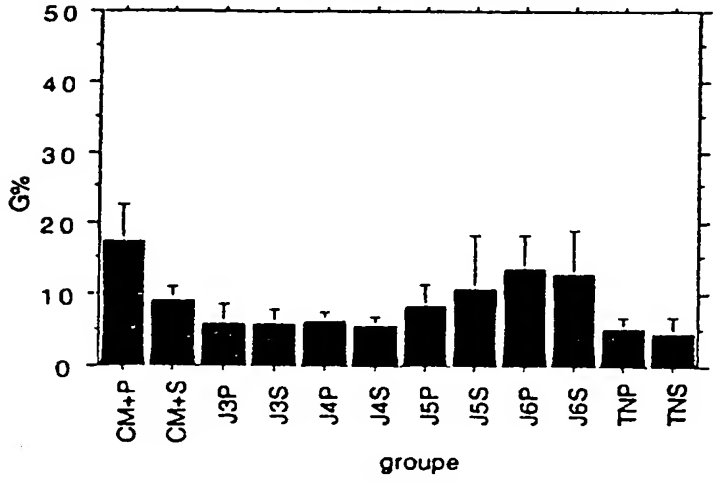


FIG.68C

FIG. 68D

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	8,127	7,160	,0267	S
CM+P, J3P	11,232	7,792	,0053	S
CM+P, J3S	11,384	8,307	,0079	S
CM+P, J4P	11,073	6,782	,0017	S
CM+P, J4S	11,803	6,782	,0009	S
CM+P, J5P	8,810	6,782	,0116	S
CM+P, J5S	6,459	6,845	,0566	
CM+P, J6P	3,872	6,782	,2589	
CM+P, J6S	4,465	6,845	,1846	
CM+P, TNP	12,199	10,507	,0235	S
CM+P, TNS	12,826	9,100	,0064	S
CM+S, J3P	3,105	7,535	,4140	
CM+S, J3S	3,257	8,066	,4234	
CM+S, J4P	2,946	6,485	,3682	
CM+S, J4S	3,676	6,485	,2622	
CM+S, J5P	,683	6,485	,8343	
CM+S, J5S	-1,669	6,342	,6015	
CM+S, J6P	-4,256	6,485	,1950	
CM+S, J6S	-3,662	6,342	,2534	
CM+S, TNP	4,072	10,318	,4340	
CM+S, TNS	4,699	8,880	,2949	
J3P, J3S	,152	8,633	,9721	
J3P, J4P	-,160	7,178	,9647	
J3P, J4S	,571	7,178	,8745	
J3P, J5P	-2,422	7,178	,5032	
J3P, J5S	-4,774	7,049	,1812	
J3P, J6P	-7,361	7,178	,0446	S
J3P, J6S	-6,768	7,049	,0596	
J3P, TNP	,966	10,767	,8585	
J3P, TNS	1,594	9,398	,7362	
J3S, J4P	-,312	7,733	,9362	
J3S, J4S	,419	7,733	,9143	
J3S, J5P	-2,574	7,733	,5090	
J3S, J5S	-4,926	7,613	,2012	
J3S, J6P	-7,513	7,733	,0567	
J3S, J6S	-6,920	7,613	,0742	
J3S, TNP	,814	11,145	,8846	
J3S, TNS	1,442	9,829	,7708	
J4P, J4S	,730	6,066	,8110	
J4P, J5P	-2,263	6,066	,4595	
J4P, J5S	-4,614	5,913	,1242	
J4P, J6P	-7,201	6,066	,0207	S
J4P, J6S	-6,608	5,913	,0290	S
J4P, TNP	1,126	10,060	,8240	
J4P, TNS	1,754	8,579	,6848	
J4S, J5P	-2,993	6,066	,3286	
J4S, J5S	-5,345	5,913	,0757	
J4S, J6P	-7,932	6,066	,0111	S
J4S, J6S	-7,338	5,913	,0157	S
J4S, TNP	,396	10,060	,9377	
J4S, TNS	1,023	8,579	,8127	
J5P, J5S	-2,351	5,913	,4304	
J5P, J6P	-4,938	6,066	,1090	
J5P, J6S	-4,345	5,913	,1473	
J5P, TNP	3,389	10,060	,5040	
J5P, TNS	4,016	8,579	,3538	
J5S, J6P	-2,587	5,913	,3859	
J5S, J6S	-1,994	5,755	,4920	
J5S, TNP	5,740	9,968	,2547	
J5S, TNS	6,368	8,471	,1384	
J6P, J6S	,593	5,913	,8420	
J6P, TNP	8,327	10,060	,1033	
J6P, TNS	8,955	8,579	,0410	S
J6S, TNP	7,734	9,968	,1263	
J6S, TNS	8,361	8,471	,0530	
TNP, TNS	,628	11,748	,9155	

FIG. 68E

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	1366,839	124,258	2,439	,0125	26,832	,935
Résidu	68	3463,904	50,940				

Tableau de moyennes pour TCRBV18
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	5	20,923	14,298	6,394
CM+S	7	12,460	4,456	1,684
J3P	4	10,425	4,718	2,359
J3S	4	11,167	3,982	1,991
J4P	8	9,540	3,210	1,135
J4S	9	8,739	3,488	1,163
J5P	9	12,342	4,375	1,458
J5S	10	13,509	9,823	3,106
J6P	8	20,235	9,202	3,253
J6S	10	17,530	7,806	2,468
TNP	2	8,387	2,214	1,566
TNS	4	8,319	5,022	2,511

FIG. 68F

Graphique des interactions pour TCRBV18
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

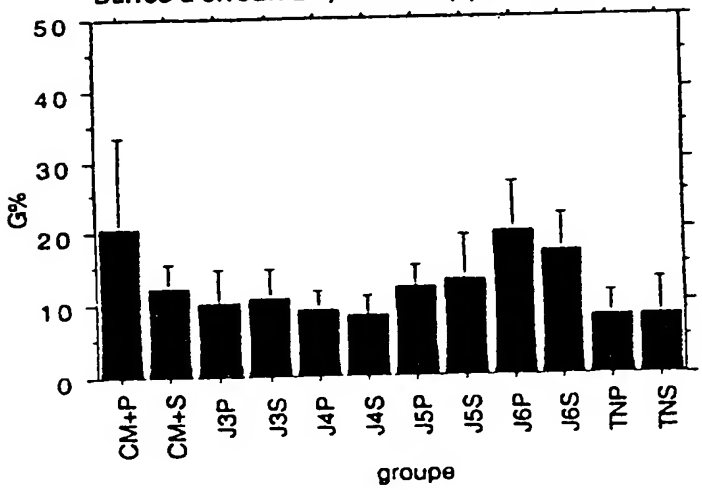


FIG. 68G

FIG. 68 H

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	8,463	8,339	,0468	S
CM+P, J3P	10,498	9,554	,0318	S
CM+P, J3S	9,756	9,554	,0455	S
CM+P, J4P	11,383	8,119	,0067	S
CM+P, J4S	12,184	7,944	,0032	S
CM+P, J5P	8,582	7,944	,0346	S
CM+P, J5S	7,414	7,801	,0621	
CM+P, J6P	,689	8,119	,8661	
CM+P, J6S	3,393	7,801	,3884	
CM+P, TNP	12,536	11,916	,0395	S
CM+P, TNS	12,604	9,554	,0105	S
CM+S, J3P	2,035	8,927	,6506	
CM+S, J3S	1,293	8,927	,7734	
CM+S, J4P	2,920	7,371	,4320	
CM+S, J4S	3,721	7,177	,3045	
CM+S, J5P	,119	7,177	,9738	
CM+S, J5S	-1,049	7,019	,7665	
CM+S, J6P	-7,775	7,371	,0390	S
CM+S, J6S	-5,070	7,019	,1541	
CM+S, TNP	4,073	11,419	,4790	
CM+S, TNS	4,141	8,927	,3579	
J3P, J3S	-,742	10,071	,8836	
J3P, J4P	,884	8,721	,8402	
J3P, J4S	1,686	8,558	,6955	
J3P, J5P	-1,917	8,558	,6564	
J3P, J5S	-3,084	8,426	,4677	
J3P, J6P	-9,810	8,721	,0281	S
J3P, J6S	-7,105	8,426	,0970	
J3P, TNP	2,038	12,334	,7426	
J3P, TNS	2,106	10,071	,6778	
J3S, J4P	1,626	8,721	,7110	
J3S, J4S	2,428	8,558	,5732	
J3S, J5P	-1,175	8,558	,7850	
J3S, J5S	-2,342	8,426	,5810	
J3S, J6P	-9,068	8,721	,0418	S
J3S, J6S	-6,363	8,426	,1365	
J3S, TNP	2,780	12,334	,6543	
J3S, TNS	2,848	10,071	,5744	
J4P, J4S	,801	6,920	,8180	
J4P, J5P	-2,801	6,920	,4221	
J4P, J5S	-3,968	6,756	,2452	
J4P, J6P	-10,694	7,121	,0038	S
J4P, J6S	-7,989	6,756	,0212	S
J4P, TNP	1,153	11,259	,8386	
J4P, TNS	1,221	8,721	,7807	
J4S, J5P	-3,602	6,714	,2881	
J4S, J5S	-4,770	6,544	,1504	
J4S, J6P	-11,496	6,920	,0015	S
J4S, J6S	-8,791	6,544	,0092	S
J4S, TNP	,352	11,134	,9499	
J4S, TNS	,420	8,558	,9223	
J5P, J5S	-1,167	6,544	,7230	
J5P, J6P	-7,893	6,920	,0260	S
J5P, J6S	-5,188	6,544	,1183	
J5P, TNP	3,955	11,134	,4809	
J5P, TNS	4,023	8,558	,3516	
J5S, J6P	-6,726	6,756	,0510	
J5S, J6S	-4,021	6,369	,2121	
J5S, TNP	5,122	11,032	,3575	
J5S, TNS	5,190	8,426	,2233	
J6P, J6S	2,705	6,756	,4271	
J6P, TNP	11,848	11,259	,0395	S
J6P, TNS	11,916	8,721	,0081	S
J6S, TNP	9,143	11,032	,1028	
J6S, TNS	9,211	8,426	,0326	S
TNP, TNS	,068	12,334	,9913	

FIG. 69A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	11	1340,545	121,868	2,791	,0044	30,703	,968
Résidu	72	3143,624	43,661				

Tableau de moyennes pour TCRBV20
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	5	27,772	16,719	7,477
CM+S	7	11,353	4,473	1,690
J3P	5	10,625	,982	,439
J3S	4	11,679	3,970	1,985
J4P	10	13,862	5,854	1,851
J4S	9	11,847	3,898	1,299
J5P	9	10,533	4,189	1,396
J5S	10	11,711	5,365	1,697
J6P	9	15,138	7,611	2,537
J6S	10	13,643	7,756	2,453
TNP	2	11,871	2,021	1,429
TNS	4	9,130	2,304	1,152

FIG. 69B

Graphique des interactions pour TCRBV20
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

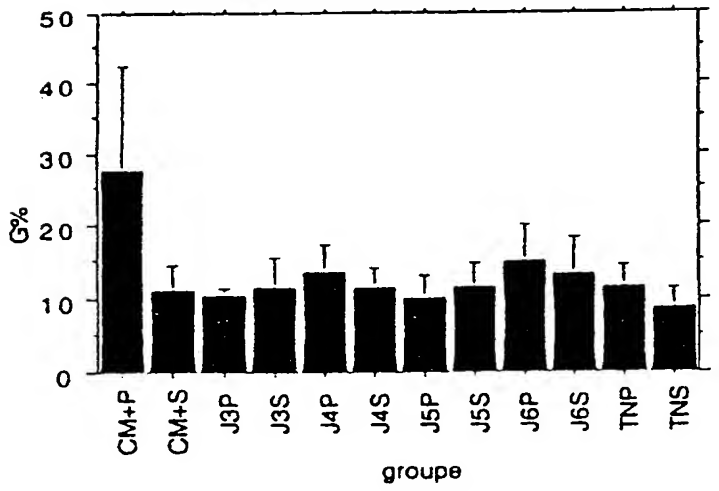


FIG.69C

FIG. 69D

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	16,419	7,713	<,0001	S
CM+P, J3P	17,147	8,331	,0001	S
CM+P, J3S	16,092	8,836	,0005	S
CM+P, J4P	13,910	7,215	,0003	S
CM+P, J4S	15,924	7,347	<,0001	S
CM+P, J5P	17,238	7,347	<,0001	S
CM+P, J5S	16,061	7,215	<,0001	S
CM+P, J6P	12,634	7,347	,0010	S
CM+P, J6S	14,128	7,215	,0002	S
CM+P, TNP	15,901	11,021	,0053	S
CM+P, TNS	16,642	8,836	<,0001	S
CM+S, J3P	,728	7,713	,8513	
CM+S, J3S	-,326	8,256	,9374	
CM+S, J4P	-2,509	6,491	,4435	
CM+S, J4S	-,495	6,638	,8823	
CM+S, J5P	,819	6,638	,8063	
CM+S, J5S	-,358	6,491	,9128	
CM+S, J6P	-3,785	6,638	,2594	
CM+S, J6S	-2,291	6,491	,4840	
CM+S, TNP	-,518	10,561	,9224	
CM+S, TNS	2,223	8,256	,5931	
J3P, J3S	-1,054	8,836	,8126	
J3P, J4P	-3,237	7,215	,3741	
J3P, J4S	-1,223	7,347	,7410	
J3P, J5P	,091	7,347	,9803	
J3P, J5S	-1,086	7,215	,7650	
J3P, J6P	-4,513	7,347	,2247	
J3P, J6S	-3,019	7,215	,4070	
J3P, TNP	-1,246	11,021	,8223	
J3P, TNS	1,495	8,836	,7369	
J3S, J4P	-2,183	7,793	,5783	
J3S, J4S	-,168	7,915	,9663	
J3S, J5P	1,146	7,915	,7738	
J3S, J5S	-,032	7,793	,9936	
J3S, J6P	-3,459	7,915	,3866	
J3S, J6S	-1,964	7,793	,6169	
J3S, TNP	-,192	11,407	,9734	
J3S, TNS	2,550	9,314	,5870	
J4P, J4S	2,014	6,052	,5091	
J4P, J5P	3,328	6,052	,2766	
J4P, J5S	2,151	5,891	,4690	
J4P, J6P	-1,276	6,052	,6755	
J4P, J6S	,218	5,891	,9413	
J4P, TNP	1,991	10,203	,6984	
J4P, TNS	4,732	7,793	,2300	
J4S, J5P	1,314	6,209	,6744	
J4S, J5S	,137	6,052	,9642	
J4S, J6P	-3,290	6,209	,2943	
J4S, J6S	-1,796	6,052	,5560	
J4S, TNP	-,023	10,297	,9964	
J4S, TNS	2,718	7,915	,4959	
J5P, J5S	-1,177	6,052	,6993	
J5P, J6P	-4,604	6,209	,1437	
J5P, J6S	-3,110	6,052	,3091	
J5P, TNP	-1,337	10,297	,7964	
J5P, TNS	1,404	7,915	,7247	
J5S, J6P	-3,427	6,052	,2627	
J5S, J6S	-1,933	5,891	,5152	
J5S, TNP	-,160	10,203	,9751	
J5S, TNS	2,581	7,793	,5112	
J6P, J6S	1,494	6,052	,6241	
J6P, TNP	3,267	10,297	,5291	
J6P, TNS	6,008	7,915	,1346	
J6S, TNP	1,773	10,203	,7301	
J6S, TNS	4,514	7,793	,2520	
TNP, TNS	2,741	11,407	,6334	

FIG. 70A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	432,969	86,594	2,011	,0866	10,054	,640
Résidu	76	3272,846	43,064				

Tableau de moyennes pour TCRBV01
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	13	11,087	8,348	2,315
CM+S	17	11,091	8,232	1,996
J5P	9	7,802	9,117	3,039
J5S	10	6,450	1,743	,551
TNP	16	5,478	1,746	,436
TNS	17	6,828	6,196	1,503

FIG. 70B

Graphique des interactions pour TCRBV01
Effet : Groupe
Barres d'erreur: ± 1,96 Erreur(s) standard

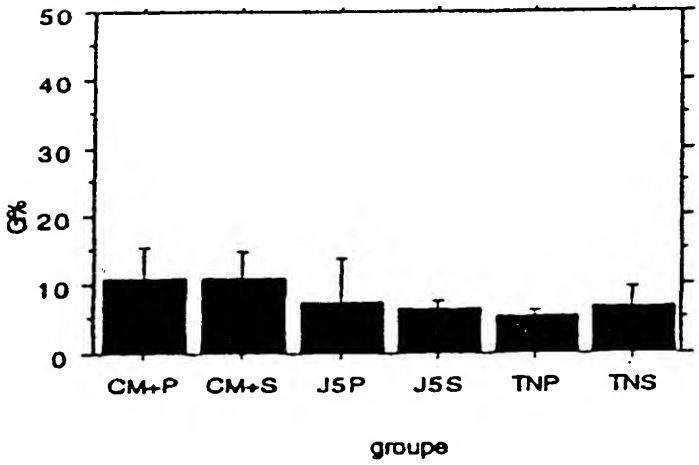


FIG. 70C

FIG. 70D

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	-,003	4,815	,9989	
CM+P, J5P	3,285	5,668	,2520	
CM+P, J5S	4,637	5,498	,0971	
CM+P, TNP	5,609	4,880	,0248	S
CM+P, TNS	4,259	4,815	,0822	
CM+S, J5P	3,288	5,388	,2279	
CM+S, J5S	4,641	5,209	,0800	
CM+S, TNP	5,613	4,552	,0164	S
CM+S, TNS	4,262	4,483	,0621	
J5P, J5S	1,352	6,005	,6550	
J5P, TNP	2,324	5,446	,3979	
J5P, TNS	,974	5,388	,7197	
J5S, TNP	,972	5,269	,7143	
J5S, TNS	-,378	5,209	,8854	
TNP, TNS	-1,350	4,552	,5565	

FIG. 70E

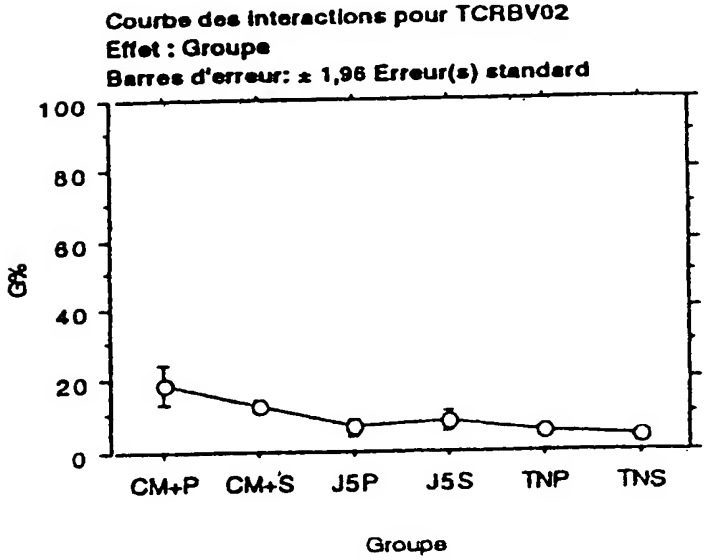
Tableau ANOVA pour TCRBV02

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	2260,845	452,169	12,349	<,0001	61,745	1,000
Résidu	78	2856,039	36,616				

Tableau de moyennes pour TCRBV02
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	16	18,682	11,485	2,871
CM+S	17	12,334	4,730	1,147
J5P	9	6,816	3,816	1,272
J5S	10	8,401	4,782	1,512
TNP	16	5,498	2,944	,736
TNS	16	4,234	2,115	,529

FIG. 70F



CM^+ contains J6

TN contains J3, J4

FIG. 70G

Test PLSD de Fisher pour TCRBV02
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	6,348	4,196	,0035	S
CM+P, J5P	11,866	5,020	<,0001	S
CM+P, J5S	10,282	4,856	<,0001	S
CM+P, TNP	13,184	4,259	<,0001	S
CM+P, TNS	14,449	4,259	<,0001	S
CM+S, J5P	5,518	4,966	,0299	S
CM+S, J5S	3,933	4,801	,1069	
CM+S, TNP	6,836	4,196	,0017	S
CM+S, TNS	8,100	4,196	,0002	S
J5P, J5S	-1,585	5,535	,5703	
J5P, TNP	1,318	5,020	,6027	
J5P, TNS	2,582	5,020	,3090	
J5S, TNP	2,903	4,856	,2377	
J5S, TNS	4,167	4,856	,0916	
TNP, TNS	1,264	4,259	,5562	

FIG. 70 H

FIG. 71A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	1527,689	305,538	9,429	<,0001	47,145	1,000
Résidu	78	2527,492	32,404				

Tableau de moyennes pour TCRBV03
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	15	15,663	6,016	1,553
CM+S	17	13,392	7,788	1,889
J5P	8	5,793	1,245	,440
J5S	10	10,189	5,355	1,693
TNP	17	6,590	6,854	1,662
TNS	17	4,402	1,366	,331

FIG. 71B

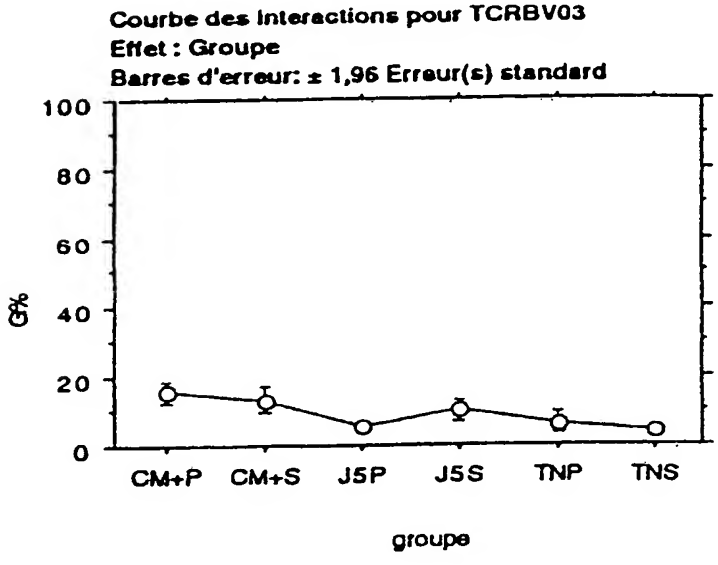


FIG. 71C

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	2,271	4,015	,2635	
CM+P, J5P	9,870	4,961	,0002	S
CM+P, J5S	5,474	4,627	,0210	S
CM+P, TNP	9,073	4,015	<,0001	S
CM+P, TNS	11,261	4,015	<,0001	S
CM+S, J5P	7,599	4,859	,0026	S
CM+S, J5S	3,203	4,516	,1620	
CM+S, TNP	6,802	3,887	,0008	S
CM+S, TNS	8,990	3,887	<,0001	S
J5P, J5S	-4,396	5,376	,1076	
J5P, TNP	-,797	4,859	,7448	
J5P, TNS	1,391	4,859	,5703	
J5S, TNP	3,599	4,516	,1167	
J5S, TNS	5,787	4,516	,0127	S
TNP, TNS	2,188	3,887	,2658	

FIG. 71D

FIG. 71E

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	390,352	78,070	1,752	,1328	8,762	,569
Résidu	77	3430,317	44,550				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	14	11,624	9,605	2,567
CM+S	17	7,556	3,093	,750
J5P	9	10,016	10,982	3,661
J5S	10	5,395	2,913	,921
TNP	17	8,235	7,874	1,910
TNS	16	5,528	1,724	,431

FIG. 71F

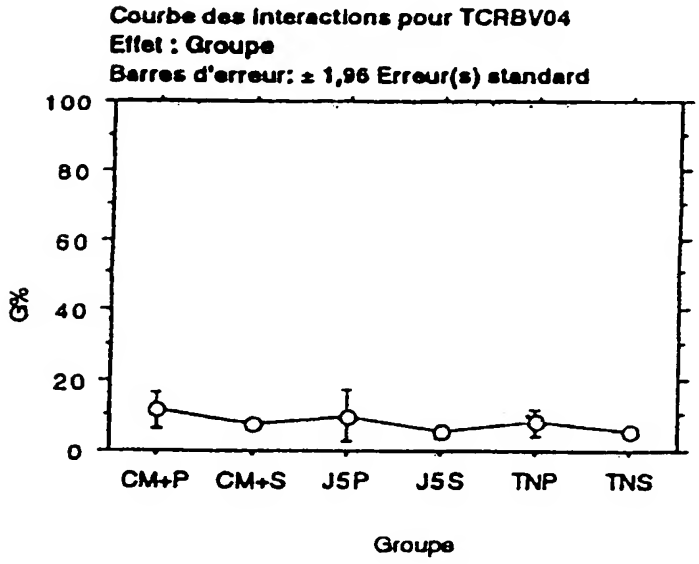


FIG. 71G

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	4,068	4,797	,0953	
CM+P, J5P	1,608	5,678	,5744	
CM+P, J5S	6,229	5,503	,0270	S
CM+P, TNP	3,389	4,797	,1635	
CM+P, TNS	6,096	4,864	,0147	S
CM+S, J5P	-2,460	5,479	,3741	
CM+S, J5S	2,161	5,297	,4191	
CM+S, TNP	-,679	4,559	,7675	
CM+S, TNS	2,028	4,629	,3858	
J5P, J5S	4,621	6,107	,1360	
J5P, TNP	1,781	5,479	,5195	
J5P, TNS	4,488	5,538	,1107	
J5S, TNP	-2,840	5,297	,2890	
J5S, TNS	-,133	5,358	,9607	
TNP, TNS	2,707	4,629	,2478	

FIG. 71 H

FIG. 72A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	1177,396	235,479	3,026	,0162	15,129	,840
Résidu	65	5058,617	77,825				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	14	22,742	8,379	2,239
CM+S	15	17,817	8,119	2,096
J5P	7	20,393	9,875	3,733
J5S	8	15,429	8,348	2,952
TNP	13	18,467	12,720	3,528
TNS	14	10,498	4,002	1,070

FIG. 72B

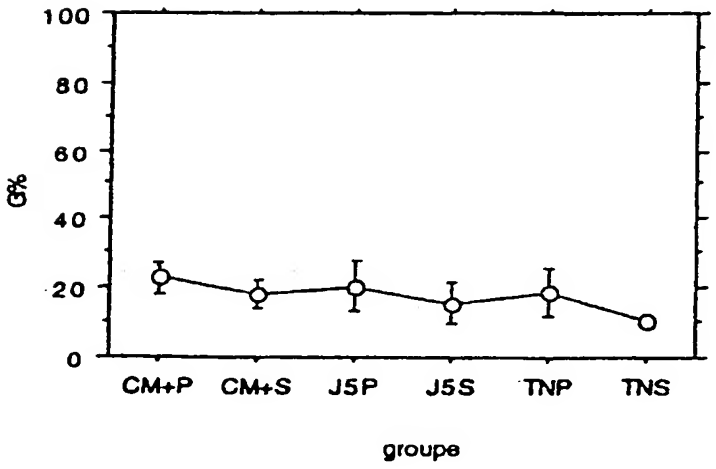


FIG. 72C

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	4,925	6,547	,1379	
CM+P, J5P	2,349	6,156	,5672	
CM+P, J5S	7,312	7,809	,0660	
CM+P, TNP	4,275	6,786	,2128	
CM+P, TNS	12,244	6,659	,0005	S
CM+S, J5P	-2,576	6,065	,5258	
CM+S, J5S	2,388	7,713	,5385	
CM+S, TNP	-,649	6,676	,8466	
CM+S, TNS	7,319	6,547	,0290	S
J5P, J5S	4,964	9,118	,2810	
J5P, TNP	1,927	8,260	,6429	
J5P, TNS	9,895	8,156	,0182	S
J5S, TNP	-3,037	7,917	,4464	
J5S, TNS	4,931	7,809	,2117	
TNP, TNS	7,968	6,786	,0221	S

FIG. 72D

FIG. 72E

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	916,180	183,236	7,464	<,0001	37,318	,999
Résidu	74	1816,741	24,551				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	13	16,559	7,514	2,084
CM+S	17	9,926	3,585	,869
J5P	6	17,091	3,750	1,326
J5S	10	8,415	6,726	2,127
TNP	15	11,815	5,086	1,313
TNS	17	8,117	2,031	,492

FIG. 72F

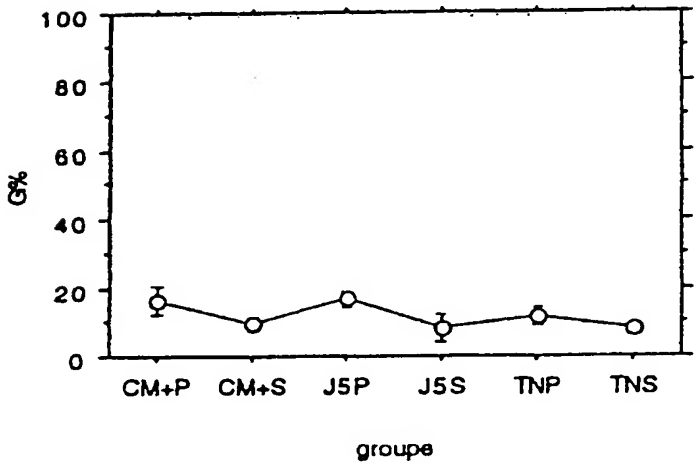


FIG. 72G

FIG. 72H

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	6,633	3,637	,0005	S
CM+P, J5P	-,532	4,436	,8117	
CM+P, J5S	8,144	4,153	,0002	S
CM+P, TNP	4,745	3,741	,0136	S
CM+P, TNS	8,442	3,637	<,0001	S
CM+S, J5P	-7,166	4,233	,0012	S
CM+S, J5S	1,511	3,935	,4466	
CM+S, TNP	-1,889	3,497	,2854	
CM+S, TNS	1,808	3,386	,2907	
J5P, J5S	8,677	4,683	,0004	S
J5P, TNP	5,277	4,322	,0174	S
J5P, TNS	8,974	4,233	<,0001	S
J5S, TNP	-3,400	4,031	,0970	
J5S, TNS	,298	3,935	,8806	
TNP, TNS	3,697	3,497	,0386	S

FIG. 73A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	788,066	157,613	2,447	,0409	12,237	,745
Résidu	79	5087,612	64,400				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	15	17,007	8,620	2,226
CM+S	17	13,682	9,336	2,264
J5P	9	7,467	2,436	,812
J5S	9	10,375	8,168	2,723
TNP	17	9,357	6,546	1,588
TNS	18	10,441	9,029	2,128

FIG. 73B

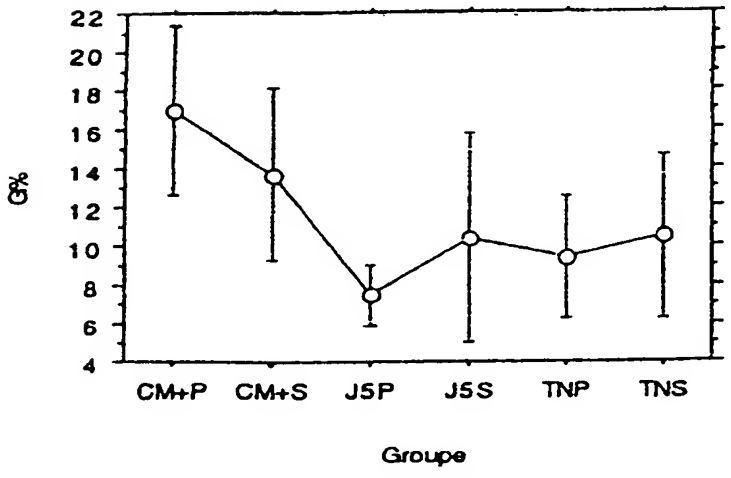


FIG. 73C

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	3,325	5,658	,2457	
CM+P, J5P	9,539	6,735	,0061	S
CM+P, J5S	6,631	6,735	,0535	
CM+P, TNP	7,650	5,658	,0087	S
CM+P, TNS	6,566	5,584	,0218	S
CM+S, J5P	6,215	6,585	,0640	
CM+S, J5S	3,307	6,585	,3206	
CM+S, TNP	4,325	5,479	,1201	
CM+S, TNS	3,241	5,402	,2360	
J5P, J5S	-2,908	7,530	,4444	
J5P, TNP	-1,890	6,585	,5694	
J5P, TNS	-2,974	6,521	,3668	
J5S, TNP	1,018	6,585	,7590	
J5S, TNS	-,066	6,521	,9841	
TNP, TNS	-1,084	5,402	,6907	

FIG. 73D

FIG. 73E

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	1142,901	228,580	3,361	,0084	16,806	,889
Résidu	79	5372,547	68,007				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	15	19,250	11,734	3,030
CM+S	17	13,065	8,253	2,002
J5P	9	7,781	3,973	1,324
J5S	10	11,235	7,477	2,365
TNP	16	8,817	5,986	1,496
TNS	18	11,242	8,360	1,971

FIG. 73F

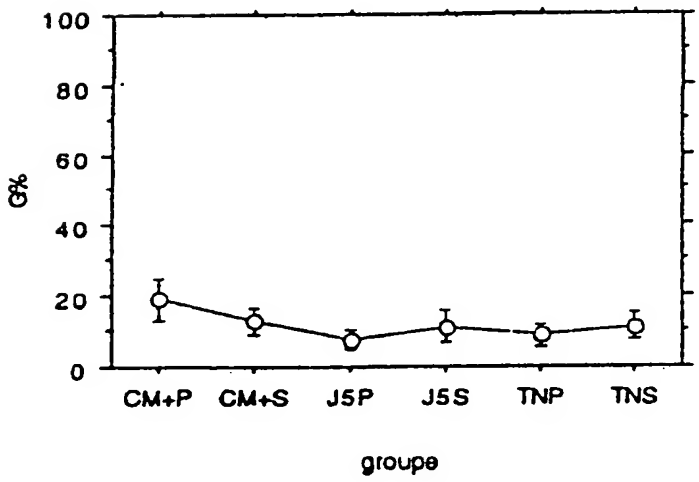


FIG. 73G

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	6,186	5,815	,0374	S
CM+P, J5P	11,469	6,921	,0015	S
CM+P, J5S	8,015	6,701	,0197	S
CM+P, TNP	10,433	5,899	,0007	S
CM+P, TNS	8,008	5,739	,0068	S
CM+S, J5P	5,283	6,767	,1242	
CM+S, J5S	1,829	6,542	,5794	
CM+S, TNP	4,247	5,717	,1432	
CM+S, TNS	1,822	5,551	,5154	
J5P, J5S	-3,454	7,542	,3648	
J5P, TNP	-1,036	6,839	,7639	
J5P, TNS	-3,461	6,701	,3071	
J5S, TNP	2,418	6,617	,4691	
J5S, TNS	-,007	6,474	,9982	
TNP, TNS	-2,425	5,640	,3946	

FIG. 73H

FIG. 74A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	366,810	73,362	5,005	,0005	25,027	,983
Résidu	79	1157,847	14,656				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	14	10,344	4,444	1,188
CM+S	17	10,640	6,391	1,550
J5P	9	6,969	1,629	,543
J5S	10	6,622	2,787	,881
TNP	17	6,681	1,623	,394
TNS	18	5,469	2,592	,611

FIG. 74B

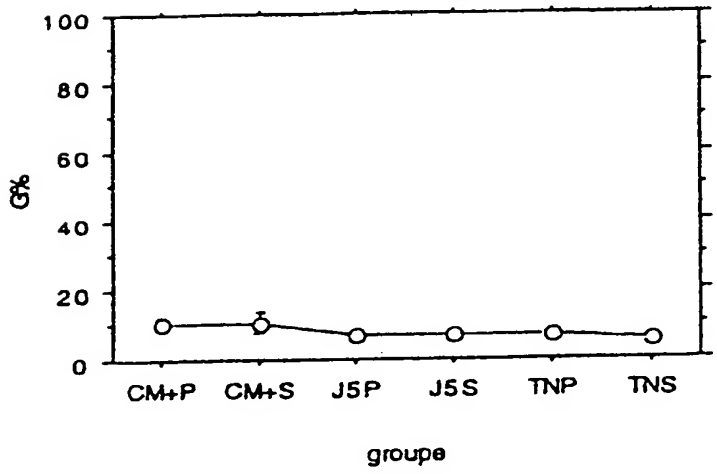


FIG. 74C

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	-,297	2,750	,8306	
CM+P, J5P	3,375	3,256	,0424	S
CM+P, J5S	3,722	3,155	,0214	S
CM+P, TNP	3,663	2,750	,0097	S
CM+P, TNS	4,875	2,715	,0006	S
CM+S, J5P	3,671	3,141	,0226	S
CM+S, J5S	4,018	3,037	,0102	S
CM+S, TNP	3,959	2,614	,0035	S
CM+S, TNS	5,172	2,577	,0001	S
J5P, J5S	,347	3,501	,8442	
J5P, TNP	,288	3,141	,8558	
J5P, TNS	1,500	3,111	,3400	
J5S, TNP	-,059	3,037	,9693	
J5S, TNS	1,154	3,005	,4471	
TNP, TNS	1,213	2,577	,3519	

FIG. 74D

FIG. 74E

Tableau ANOVA pour TCRBV08.2

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	150,431	30,086	1,097	,3688	5,485	,364
Résidu	78	2139,073	27,424				

Tableau de moyennes pour TCRBV08.2
Effet : Groupe

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	14	9,586	4,674	1,249
CM+S	17	10,574	7,927	1,923
J5P	8	7,913	2,982	1,054
J5S	10	7,678	4,199	1,328
TNP	17	7,001	3,136	,760
TNS	18	7,644	5,266	1,241

FIG. 74F

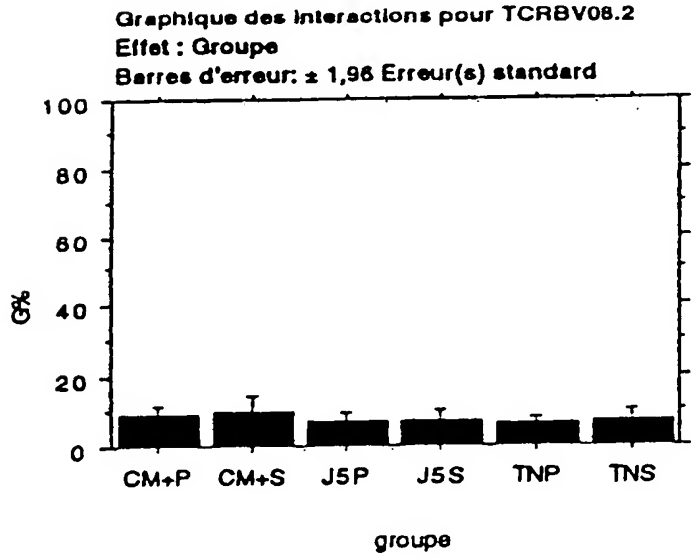


FIG. 74G

Test PLSD de Fisher pour TCRBV08.2
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p
CM+P, CM+S	-,989	3,763	,6023
CM+P, J5P	1,673	4,621	,4732
CM+P, J5S	1,907	4,317	,3817
CM+P, TNP	2,585	3,763	,1754
CM+P, TNS	1,942	3,715	,3013
CM+S, J5P	2,662	4,470	,2394
CM+S, J5S	2,896	4,155	,1692
CM+S, TNP	3,573	3,576	,0502
CM+S, TNS	2,931	3,526	,1020
J5P, J5S	,234	4,945	,9250
J5P, TNP	,912	4,470	,6858
J5P, TNS	,269	4,430	,9041
J5S, TNP	,677	4,155	,7464
J5S, TNS	,034	4,112	,9867
TNP, TNS	-,643	3,526	,7176

FIG. 74H

FIG. 75A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	495,165	99,033	3,518	,0064	17,592	,906
Résidu	79	2223,623	28,147				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	16	9,855	10,116	2,529
CM+S	17	8,560	5,555	1,347
J5P	8	6,072	2,450	,866
J5S	10	3,777	1,722	,545
TNP	17	4,949	2,433	,590
TNS	17	3,743	1,405	,341

FIG. 75B

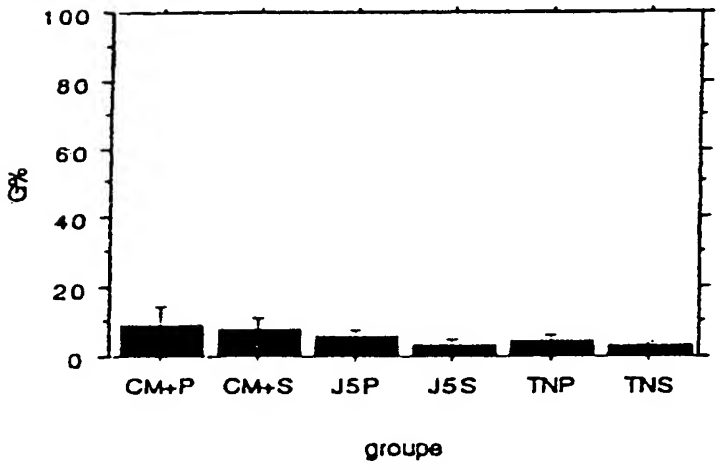


FIG. 75C

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	1,295	3,678	,4854	
CM+P, J5P	3,783	4,573	,1036	
CM+P, J5S	6,078	4,257	,0057	S
CM+P, TNP	4,906	3,678	,0096	S
CM+P, TNS	6,111	3,678	,0014	S
CM+S, J5P	2,487	4,528	,2775	
CM+S, J5S	4,782	4,208	,0265	S
CM+S, TNP	3,611	3,622	,0507	
CM+S, TNS	4,816	3,622	,0098	S
J5P, J5S	2,295	5,009	,3646	
J5P, TNP	1,123	4,528	,8227	
J5P, TNS	2,329	4,528	,3091	
J5S, TNP	-1,171	4,208	,5811	
J5S, TNS	,034	4,208	,9873	
TNP, TNS	1,205	3,622	,5097	

FIG. 75D

FIG. 75E

Tableau ANOVA pour TCRBV09

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	901,856	180,371	1,899	,1066	9,495	,603
Résidu	65	6174,114	94,986				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	15	22,693	13,552	3,499
CM+S	13	19,176	10,554	2,927
J5P	7	20,567	6,361	2,404
J5S	8	12,019	10,703	3,784
TNP	16	16,104	5,480	1,370
TNS	12	14,248	8,373	2,417

FIG. 75F

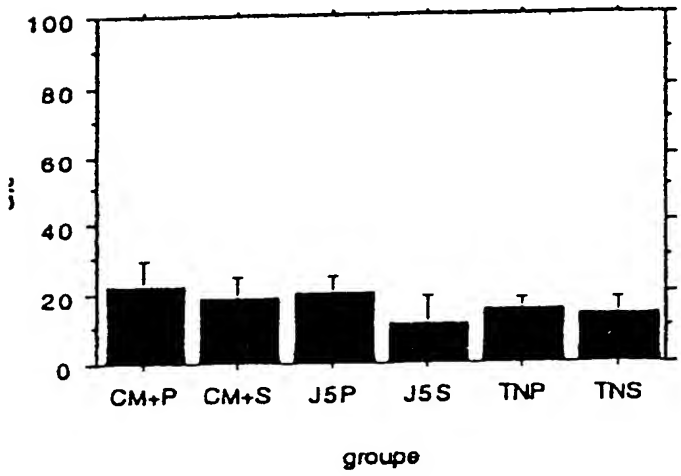


FIG. 75G

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	3,517	7,376	,3444	
CM+P, J5P	2,126	8,910	,6352	
CM+P, J5S	10,675	8,521	,0149	S
CM+P, TNP	6,589	6,995	,0644	
CM+P, TNS	8,446	7,536	,0287	S
CM+S, J5P	-1,391	9,125	,7618	
CM+S, J5S	7,158	8,746	,1070	
CM+S, TNP	3,072	7,268	,4017	
CM+S, TNS	4,928	7,792	,2110	
J5P, J5S	8,549	10,074	,0949	
J5P, TNP	4,463	8,821	,3160	
J5P, TNS	6,319	9,257	,1775	
J5S, TNP	-4,085	8,428	,3366	
J5S, TNS	-2,229	8,884	,6180	
TNP, TNS	1,856	7,433	,6196	

FIG. 75H

FIG. 76A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	366,970	73,394	,795	,5566	3,975	,266
Résidu	77	7108,560	92,319				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	16	12,620	17,634	4,408
CM+S	16	8,718	3,904	,976
J5P	9	7,336	6,956	2,319
J5S	9	9,596	8,867	2,956
TNP	16	8,428	7,638	1,910
TNS	17	6,297	4,503	1,092

FIG. 76B

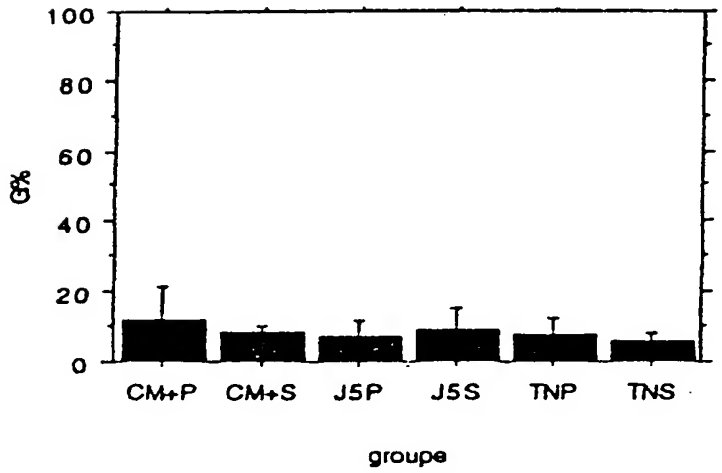


FIG. 76C

	Diff. moy.	Diff. crit.	Valeur p
CM+P, CM+S	3,902	6,764	,2542
CM+P, J5P	5,284	7,972	,1908
CM+P, J5S	3,024	7,972	,4523
CM+P, TNP	4,193	6,764	,2209
CM+P, TNS	6,323	6,664	,0626
CM+S, J5P	1,382	7,972	,7309
CM+S, J5S	-,878	7,972	,8270
CM+S, TNP	,290	6,764	,9322
CM+S, TNS	2,421	6,664	,4717
J5P, J5S	-2,260	9,019	,6193
J5P, TNP	-1,092	7,972	,7859
J5P, TNS	1,039	7,887	,7938
J5S, TNP	1,168	7,972	,7712
J5S, TNS	3,299	7,887	,4075
TNP, TNS	2,131	6,664	,5263

FIG. 76D

FIG. 76E

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	326,172	65,234	3,116	,0132	15,578	,857
Résidu	74	1549,389	20,938				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	15	14,370	5,385	1,390
CM+S	16	11,571	4,674	1,168
J5P	8	8,500	2,323	,821
J5S	9	10,472	3,326	1,109
TNP	16	8,931	4,625	1,156
TNS	16	9,506	4,958	1,239

FIG. 76F

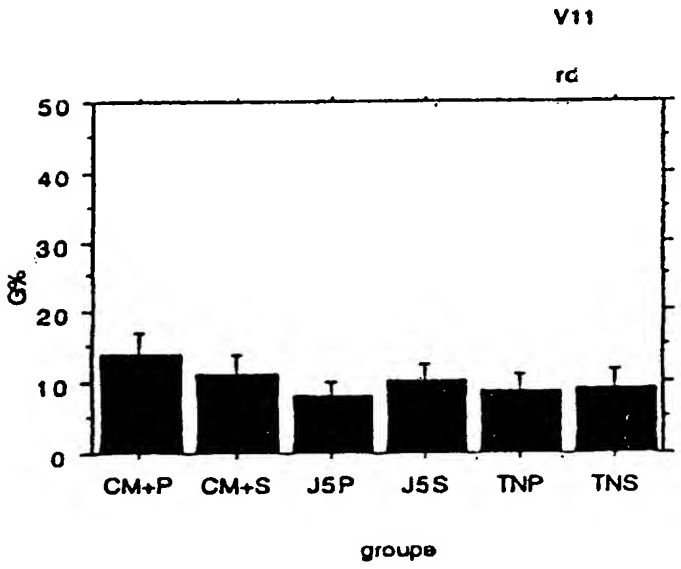


FIG. 76G

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	2,799	3,277	,0929	
CM+P, J5P	5,870	3,992	,0045	S
CM+P, J5S	3,898	3,844	,0470	S
CM+P, TNP	5,439	3,277	,0015	S
CM+P, TNS	4,864	3,277	,0042	S
CM+S, J5P	3,071	3,948	,1255	
CM+S, J5S	1,098	3,799	,5663	
CM+S, TNP	2,640	3,223	,1070	
CM+S, TNS	2,064	3,223	,2059	
J5P, J5S	-1,972	4,430	,3779	
J5P, TNP	-,431	3,948	,8284	
J5P, TNS	-1,006	3,948	,6130	
J5S, TNP	1,541	3,799	,4214	
J5S, TNS	,966	3,799	,6139	
TNP, TNS	-,575	3,223	,7231	

FIG. 76H

FIG. 77A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	440,110	88,022	1,902	,1038	9,510	,610
Résidu	76	3517,057	46,277				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	13	26,706	10,267	2,848
CM+S	16	21,490	5,750	1,438
J5P	9	21,202	7,031	2,344
J5S	10	20,410	3,361	1,063
TNP	17	19,440	4,775	1,158
TNS	17	22,585	7,476	1,813

FIG. 77B

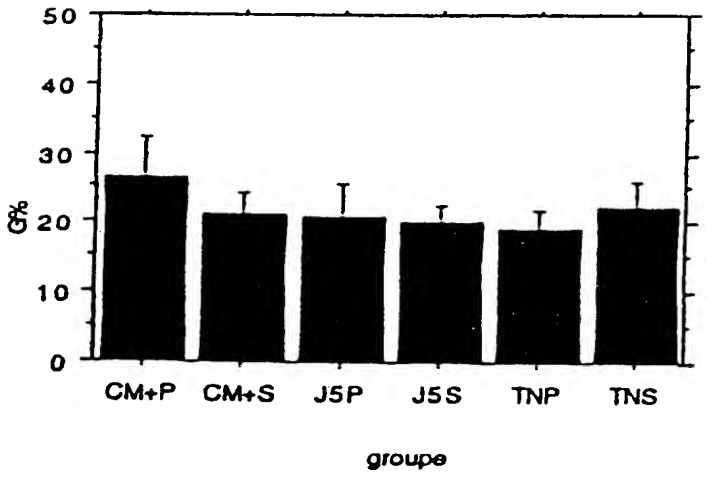


FIG. 77C

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	5,216	5,059	,0435	S
CM+P, J5P	5,504	5,875	,0659	
CM+P, J5S	6,296	5,699	,0308	S
CM+P, TNP	7,266	4,992	,0049	S
CM+P, TNS	4,121	4,992	,1043	
CM+S, J5P	,288	5,645	,9194	
CM+S, J5S	1,080	5,462	,6948	
CM+S, TNP	2,050	4,719	,3897	
CM+S, TNS	-1,095	4,719	,6454	
J5P, J5S	,792	6,225	,8006	
J5P, TNP	1,762	5,585	,5318	
J5P, TNS	-1,383	5,585	,6234	
J5S, TNP	,970	5,400	,7215	
J5S, TNS	-2,175	5,400	,4249	
TNP, TNS	-3,145	4,647	,1817	

FIG. 77D

FIG. 77E

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	271,666	54,333	1,661	,1545	8,306	,541
Résidu	75	2453,157	32,709				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	14	12,637	6,567	1,755
CM+S	17	9,220	2,776	,673
J5P	9	12,000	6,015	2,005
J5S	8	11,132	5,742	2,030
TNP	16	10,616	8,055	2,014
TNS	17	7,400	4,151	1,007

FIG. 77F

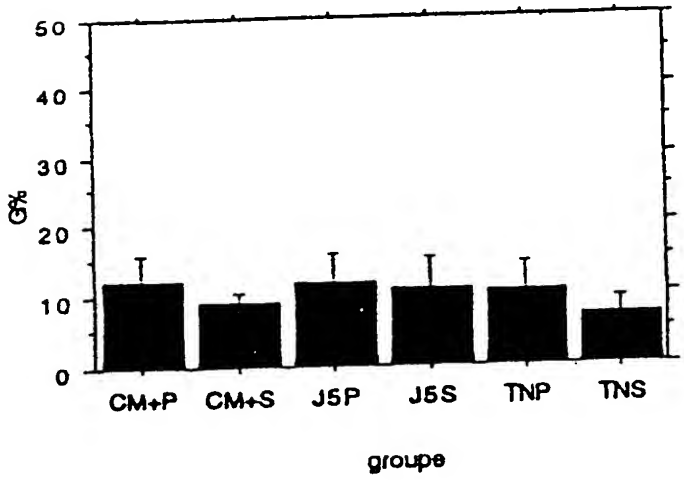


FIG. 77G

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	3,417	4,112	,1020	
CM+P, J5P	,637	4,868	,7951	
CM+P, J5S	1,505	5,049	,5545	
CM+P, TNP	2,021	4,169	,3373	
CM+P, TNS	5,237	4,112	,0132	S
CM+S, J5P	-2,780	4,697	,2421	
CM+S, J5S	-1,912	4,885	,4380	
CM+S, TNP	-1,396	3,968	,4858	
CM+S, TNS	1,821	3,908	,3563	
J5P, J5S	,868	5,536	,7557	
J5P, TNP	1,384	4,747	,5630	
J5P, TNS	4,601	4,697	,0547	
J5S, TNP	,517	4,933	,8353	
J5S, TNS	3,733	4,885	,1321	
TNP, TNS	3,216	3,968	,1106	

FIG. 77H

FIG. 78A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	212,057	42,411	2,853	,0207	14,265	,818
Résidu	74	1100,086	14,866				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	15	9,609	7,302	1,885
CM+S	15	7,351	3,241	,837
J5P	8	6,045	1,246	,440
J5S	9	5,140	1,601	,534
TNP	16	5,739	2,558	,639
TNS	17	5,179	2,195	,532

FIG. 78B

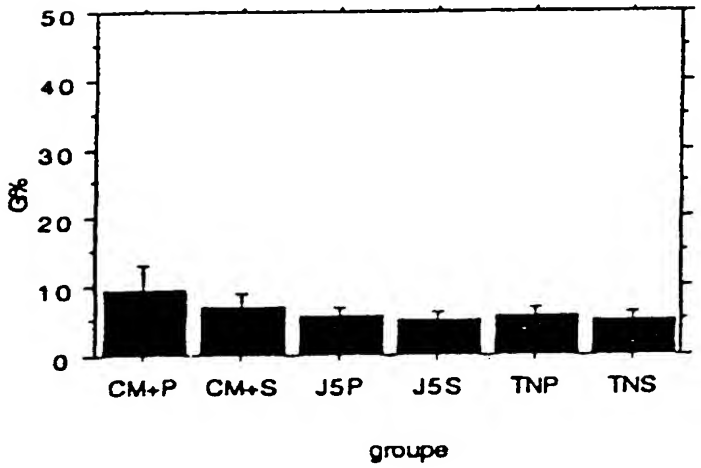


FIG. 78C

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	2,258	2,805	,1130	
CM+P, J5P	3,564	3,363	,0381	S
CM+P, J5S	4,468	3,239	,0075	S
CM+P, TNP	3,870	2,761	,0066	S
CM+P, TNS	4,429	2,722	,0018	S
CM+S, J5P	1,306	3,363	,4417	
CM+S, J5S	2,210	3,239	,1781	
CM+S, TNP	1,612	2,761	,2484	
CM+S, TNS	2,171	2,722	,1161	
J5P, J5S	,905	3,733	,6305	
J5P, TNP	,306	3,327	,8549	
J5P, TNS	,866	3,294	,6020	
J5S, TNP	-,598	3,201	,7106	
J5S, TNS	-,039	3,167	,9805	
TNP, TNS	,559	2,676	,6782	

FIG. 78D

FIG. 78E

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	392,519	78,504	3,949	,0031	19,747	,939
Résidu	75	1490,804	19,877				

	Nombre	Moyenne	Dev. Std.	Err. Std.
CM+P	13	11,151	7,292	2,022
CM+S	17	8,167	6,514	1,580
J5P	7	5,730	1,647	,622
J5S	10	5,626	1,858	,587
TNP	17	5,702	2,068	,502
TNS	17	4,728	1,904	,462

FIG. 78F

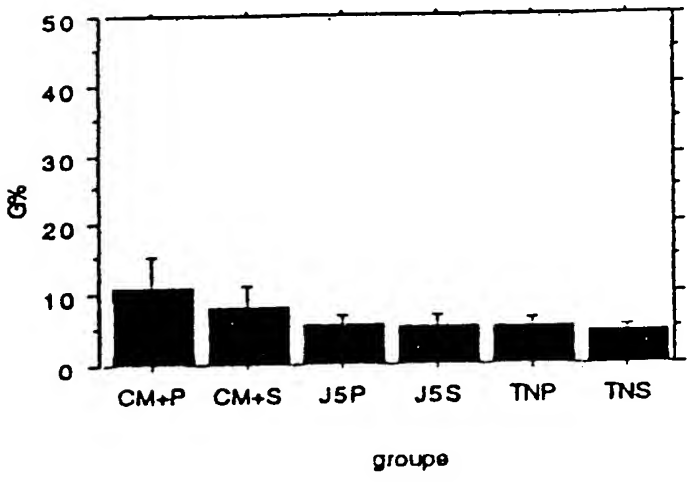


FIG. 78G

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	2,984	3,272	,0733	
CM+P, J5P	5,421	4,164	,0114	S
CM+P, J5S	5,524	3,736	,0043	S
CM+P, TNP	5,449	3,272	,0014	S
CM+P, TNS	6,422	3,272	,0002	S
CM+S, J5P	2,437	3,989	,2274	
CM+S, J5S	2,541	3,540	,1569	
CM+S, TNP	2,465	3,046	,1112	
CM+S, TNS	3,438	3,046	,0275	S
J5P, J5S	,104	4,377	,9625	
J5P, TNP	,028	3,989	,9888	
J5P, TNS	1,001	3,989	,6184	
J5S, TNP	-,076	3,540	,9662	
J5S, TNS	,898	3,540	,6148	
TNP, TNS	,973	3,046	,5264	

FIG. 78H

FIG. 79A

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	993,378	198,676	4,979	,0005	24,896	,982
Résidu	77	3072,420	39,902				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	15	15,315	6,773	1,749
CM+S	17	11,665	7,607	1,845
J5P	9	8,628	4,243	1,414
J5S	10	11,179	11,924	3,771
TNP	16	6,374	1,705	,426
TNS	16	5,747	1,577	,394

FIG. 79B

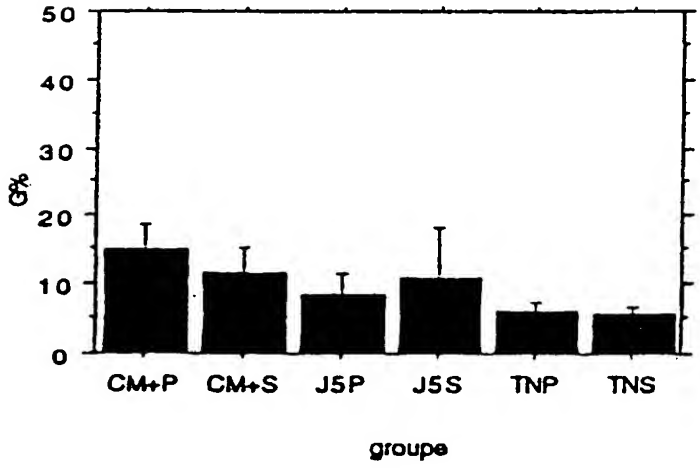


FIG. 79C

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	3,650	4,456	,1070	
CM+P, J5P	6,487	5,303	,0172	S
CM+P, J5S	4,136	5,135	,1129	
CM+P, TNP	8,940	4,521	,0002	S
CM+P, TNS	9,567	4,521	<,0001	S
CM+S, J5P	2,837	5,185	,2793	
CM+S, J5S	,486	5,013	,8475	
CM+S, TNP	5,291	4,381	,0186	S
CM+S, TNS	5,917	4,381	,0068	S
J5P, J5S	-2,351	5,779	,4203	
J5P, TNP	2,453	5,241	,3542	
J5P, TNS	3,080	5,241	,2455	
J5S, TNP	4,805	5,070	,0629	
J5S, TNS	5,432	5,070	,0361	S
TNP, TNS	,627	4,447	,7797	

FIG. 79D

FIG. 79E

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	5	1233,374	246,675	5,074	,0005	25,371	,984
Résidu	74	3597,369	48,613				

	Nombre	Moyenne	Dév. Std.	Err. Std.
CM+P	13	20,499	10,847	3,008
CM+S	17	15,442	6,952	1,686
J5P	9	12,342	4,375	1,458
J5S	10	13,509	9,623	3,106
TNP	14	9,628	3,391	,906
TNS	17	9,211	3,882	,941

FIG. 79F

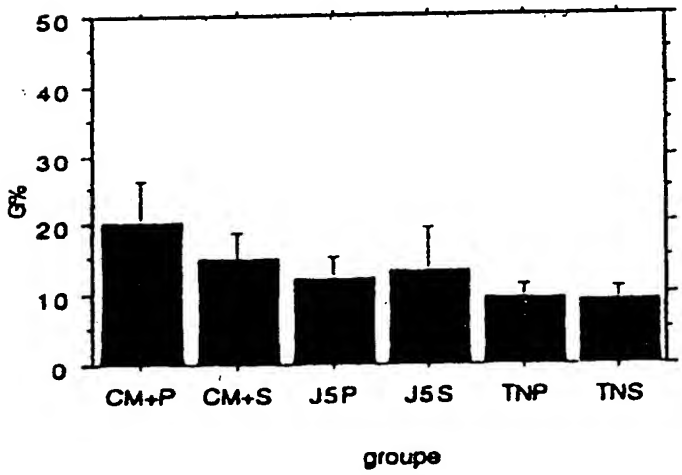


FIG. 79G

	Diff. moy.	Diff. crit.	Valeur p	
CM+P, CM+S	5,057	5,118	,0527	
CM+P, J5P	8,158	6,024	,0086	S
CM+P, J5S	6,991	5,844	,0197	S
CM+P, TNP	10,871	5,351	,0001	S
CM+P, TNS	11,288	5,119	<,0001	S
CM+S, J5P	3,101	5,727	,2842	
CM+S, J5S	1,934	5,537	,4887	
CM+S, TNP	5,814	5,014	,0236	S
CM+S, TNS	6,231	4,765	,0111	S
J5P, J5S	-1,167	6,383	,7166	
J5P, TNP	2,713	5,936	,3654	
J5P, TNS	3,130	5,727	,2797	
J5S, TNP	3,880	5,752	,1830	
J5S, TNS	4,297	5,537	,1262	
TNP, TNS	,417	5,014	,8689	

FIG. 79H

ANOVA TABLE FOR TCRBV20

TWO WAY ANOVA POWER LAMBDA CALCULATION

	DEGREE OF FREEDOM	SQUARE SUM	MEAN SQUARE	F VALUE	P VALUE		
GROUP	5	747,683	149,537	3,122	,0128	15,608	,860
RESIDUAL	78	3736,485	47,904				

FISCHER'S PLSD TEST FOR TCRBV20

EFFECT: GROUP

SIGNIFICANCE UNDER: 5%

	MEAN DIFFERENCE	CRITICAL DIFFERENCE	P VALUE	
CM+P, CM+S	6,950	4,973	,0068	S
CM+P, J5P	9,116	5,887	,0028	S
CM+P, J5S	7,939	5,705	,0070	S
CM+P, TNP	6,974	4,973	,0066	S
CM+P, TNS	8,482	4,973	,0011	S
CM+S, J5P	2,167	5,680	,4499	
CM+S, J5S	,990	5,491	,7208	
CM+S, TNP	,025	4,726	,9917	
CM+S, TNS	1,532	4,726	,5206	
J5P, J5S	-1,177	6,331	,7122	
J5P, TNP	-2,142	5,680	,4551	
J5P, TNS	-,635	5,680	,8245	
J5S, TNP	-,965	5,491	,7275	
J5S, TNS	,542	5,491	,8446	
TNP, TNS	1,507	4,726	,5274	

FIG. 80A

MEAN TABLE FOR TCRBV20
EFFECT: GROUP

	NUMBER	MEAN	STANDARD DEVIATION	STANDARD ERROR OF THE MEAN
CM+P	14	19,650	12,693	3,392
CM+S	17	12,700	6,534	1,585
J5P	9	10,533	4,189	1,396
J5S	10	11,711	5,365	1,697
TNP	17	12,675	4,696	1,139
TNS	17	11,168	3,593	,871

GRAPH OF INTERACTIONS FOR TCRBV20
EFFECT: GROUP
ERRORS BARS: ± 1,96 STANDARD ERROR OF THE MEAN

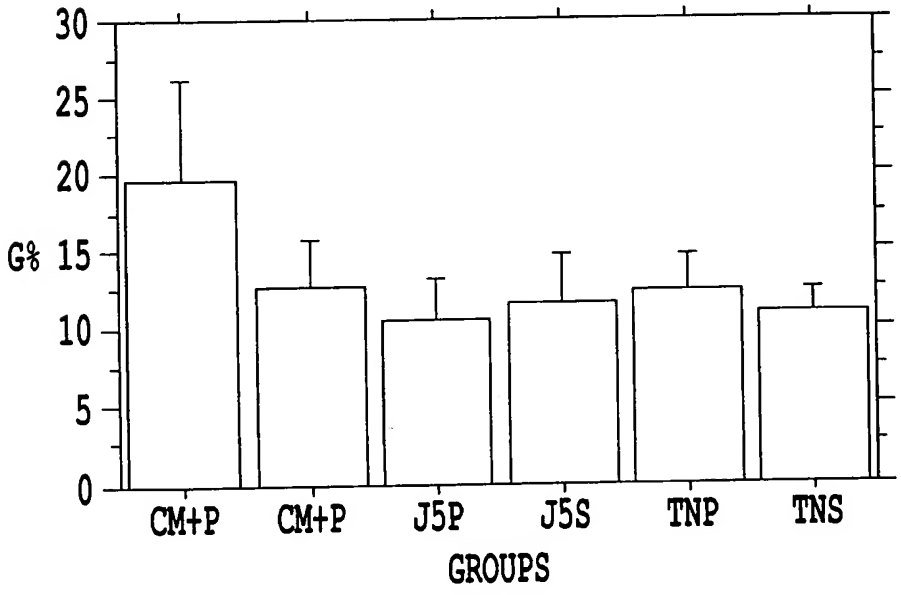


FIG. 80B

Paramètres du pic à récupérer

Taille 216

Natu TCRBV 5-2

Ecritu 13

Paramètres des fichiers à utiliser

	Classeur	Feuille	Groupe	Nature	Remarque
1	DataFormater OG/009 v1.01	Data.1	1	RT11	
2	DataFormater OG/008 v1.03	Data.2	1	RT12	
3	DataFormater OG/007 v1.04	Data.3	1	RT13	
4	DataFormater OG/009 v1.01	Data.2	1	RT14	
5	DataFormater OG/008 v1.03	Data.3	1	RT15	
6	DataFormater OG/005.4 v1.01	Data.3	1	RT28	
7	DataFormater OG/009 v1.01	Data.3	1	RT29	
8	DataFormater OG/003 v1.01	Data.2	1	RT30	
9	DataFormater OG/003 v1.01	Data.3	1	RT31	
29	DataFormater OG/019 v1.04	Data.3	2	RS21	
30	DataFormater OG/020 v1.01	Data.2	2	RS22	
31	DataFormater OG/022 v1.04	Data.1	2	RS23	
32	DataFormater OG/021 v1.04	Data.2	2	RS24	
33	DataFormater OG/022 v1.04	Data.2	2	RS25	
19	DataFormater OG/015 v1.04	Data.2	3	R3*16	
20	DataFormater OG/019 v1.04	Data.1	3	R3*17	
21	DataFormater OG/016 v1.04	Data.2	3	R3*18	
22	DataFormater OG/019 v1.04	Data.2	3	R3*19	
23	DataFormater OG/017 v1.01	Data.2	3	R3*20	
39	DataFormater OG/010 v1.04	Data.2	4	R3*S06	
40	DataFormater OG/013 v1.04	Data.1	4	R3*S07	
41	DataFormater OG/011 v1.04	Data.2	4	R3*S08	
42	DataFormater OG/013 v1.04	Data.2	4	R3*S09	
43	DataFormater OG/012 v1.04	Data.2	4	R3*S10	

FIG. 81

AC ;DA v1.08 R sans Vb19

Score oligoclonalité 16/06/00

	Score RT
TCRBV15 :174	0,16
TCRBV15 :177	0,15
TCRBV19 :167	0,14
TCRBV16 :148	0,11
TCRBV15 :171	0,10
TCRBV05.2 :216	0,10
TCRBV15 :151	0,09
TCRBV14 :158	0,09

	Score RS
TCRBV08.1 :231	0,32
TCRBV15 :174	0,19
TCRBV05.2 :216	0,18
TCRBV10 :138	0,15
TCRBV15 :177	0,14
TCRBV05.1 :225	0,14
TCRBV05.1 :222	0,13
TCRBV05.2 :219	0,13

TCRBV15 :174
TCRBV16 :148
TCRBV15 :177
TCRBV03 :153
TCRBV09 :150
TCRBV13 :168
TCRBV15 :171
TCRBV10 :138

Score R3*
0,14
0,13
0,12
0,10
0,09
0,09
0,09
0,09

	Score R3*S
TCRBV15 :174	0,15
TCRBV15 :177	0,13
TCRBV05.2 :216	0,12
TCRBV05.2 :213	0,10
TCRBV05.1 :228	0,09
TCRBV08.1 :231	0,08
TCRBV15 :171	0,08
TCRBV05.1 :225	0,08

µDVb 15/06/00

	µDVbRT	µDVbRS	µDVbR3*	µDVbR3*S
TCRBV01	7,22	5,99	9,87	6
TCRBV02	3,49	6,01	6,13	8
TCRBV03	15,85	16,58	16,28	16
TCRBV04	13,12	18,02	17,95	18
TCRBV05.1	9,42	23,63	24,96	27
TCRBV05.2	7,40	12,10	12,44	12
TCRBV06	13,04	12,37	6,61	8
TCRBV07	3,81	6,49	4,57	9
TCRBV08.1	2,40	18,20	5,98	12
TCRBV08.2	13,38	21,83	14,72	16
TCRBV08.3	4,50	8,26	5,98	5
TCRBV09	15,74	18,39	23,49	28
TCRBV10	6,93	11,33	11,69	8
TCRBV11	7,35	7,88	5,97	9
TCRBV12	14,78	14,66	8,34	13
TCRBV13	11,25	10,17	12,27	9
TCRBV14	3,28	8,20	5,43	7
TCRBV15	7,85	8,52	9,27	9
TCRBV16	17,11	15,19	13,97	12
TCRBV18	15,28	11,24	15,53	19
TCRBV20	11,82	16,43	11,61	11

FIG. 82

AC : DA v1.05 F sans Vb19 para AC → OG

Analyse foie

Paramètres du pic à récupérer

Taille 216

Natu [redacted] ICRBV32

Ecrit 13

Paramètres des fichiers à utiliser

	Classeur	Feuille	Groupe	Nature	Remarques
10	DataFormater OG/006 v1.01	Data.1	1	FT11	
11	DataFormater OG/006 v1.01	Data.2	1	FT12	
12	DataFormater OG/007 v1.04	Data.1	1	FT13	
13	DataFormater OG/007 v1.04	Data.2	1	FT14	
14	DataFormater OG/008 v1.03	Data.1	1	FT15	
15	DataFormater OG/003 v1.01	Data.1	1	FT26	
16	DataFormater OG/005.4 v1.01	Data.1	1	FT27	
17	DataFormater OG/005.4 v1.01	Data.2	1	FT28	
18	DataFormater OG/006 v1.01	Data.3	1	FT29	
24	DataFormater OG/015 v1.04	Data.1	2	F3*16	
25	DataFormater OG/015 v1.04	Data.3	2	F3*17	
26	DataFormater OG/016 v1.04	Data.1	2	F3*18	
27	DataFormater OG/016 v1.04	Data.3	2	F3*19	
28	DataFormater OG/017 v1.01	Data.1	2	F3*20	
34	DataFormater OG/017 v1.01	Data.3	3	FS21	
35	DataFormater OG/020 v1.01	Data.1	3	FS22	
36	DataFormater OG/020 v1.01	Data.3	3	FS23	
37	DataFormater OG/021 v1.04	Data.1	3	FS24	
38	DataFormater OG/021 v1.04	Data.3	3	FS25	
44	DataFormater OG/012 v1.04	Data.3	4	F3*S01	
45	DataFormater OG/033 v1.04	Data.3	4	F3*S02	
46	DataFormater OG/014 v1.01	Data.1	4	F3*S03	
47	DataFormater OG/014 v1.01	Data.2	4	F3*S04	
48	DataFormater OG/014 v1.01	Data.3	4	F3*S05	
49	DataFormater OG/010 v1.04	Data.1	4	F3*S06	
50	DataFormater OG/010 v1.04	Data.3	4	F3*S07	
51	DataFormater OG/011 v1.04	Data.1	4	F3*S08	
52	DataFormater OG/011 v1.04	Data.3	4	F3*S09	
53	DataFormater OG/012 v1.04	Data.1	4	F3*S10	

FIG. 83

FIG. 84

Classement selon le score d'oligoclonalité pour chacun des groupes

Score FT		Score F3'		Score F5'		Score F3'-S	
TCRBV19 : 184	0,11	TCRBV05.1 : 222	0,52	TCRBV05.1 : 222	1,23	TCRBV10 : 138	0,22
TCRBV19 : 161	0,29	TCRBV05.1 : 225	0,31	TCRBV05.1 : 225	0,62	TCRBV15 : 177	0,21
RBV08.1 : 231	0,17	TCRBV19 : 167	0,25	TCRBV08.1 : 231	0,39	TCRBV13 : 168	0,20
TCRBV15 : 151	0,14	TCRBV09 : 144	0,21	TCRBV08.1 : 234	0,33	TCRBV09 : 153	0,20
RBV08.1 : 234	0,12	TCRBV09 : 147	0,20	TCRBV05.1 : 228	0,29	TCRBV05.2 : 216	0,20
RBV05.1 : 225	0,12	TCRBV09 : 150	0,20	TCRBV05.2 : 216	0,21	TCRBV05.1 : 225	0,17
RBV05.2 : 219	0,10	TCRBV09 : 153	0,19	TCRBV08.1 : 228	0,20	TCRBV01 : 176	0,16
RBV08.1 : 228	0,10	TCRBV05.2 : 213	0,18	TCRBV05.2 : 219	0,18	TCRBV10 : 141	0,15
RBV05.1 : 228	0,10	TCRBV19 : 184	0,17	TCRBV10 : 146	0,17	TCRBV09 : 147	0,15
RBV05.2 : 216	0,09	TCRBV05.2 : 219	0,14	TCRBV10 : 138	0,14	TCRBV05.2 : 213	0,14
TCRBV10 : 138	0,09	TCRBV05.1 : 228	0,13	TCRBV20 : 152	0,12	TCRBV15 : 174	0,13
RBV05.1 : 222	0,08	TCRBV14 : 158	0,13	TCRBV10 : 141	0,11	TCRBV05.2 : 219	0,12
TCRBV10 : 141	0,08	TCRBV13 : 168	0,12	TCRBV05.2 : 213	0,10	TCRBV01 : 173	0,11
RBV05.2 : 222	0,07	TCRBV05.2 : 222	0,11	TCRBV13 : 168	0,10	TCRBV08 : 146	0,11
TCRBV18 : 166	0,06	TCRBV01 : 173	0,11	TCRBV15 : 174	0,09	TCRBV08.1 : 231	0,11
TCRBV18 : 169	0,06	TCRBV12 : 204	0,10	TCRBV10 : 135	0,09	TCRBV05.1 : 228	0,11
TCRBV04 : 198	0,06	TCRBV10 : 138	0,10	TCRBV16 : 145	0,09	TCRBV05.1 : 231	0,11
TCRBV12 : 204	0,06	TCRBV01 : 176	0,10	TCRBV14 : 158	0,09	TCRBV13 : 165	0,10
TCRBV13 : 168	0,06	TCRBV12 : 210	0,10	TCRBV09 : 147	0,08	TCRBV09 : 150	0,10
TCRBV01 : 176	0,05	TCRBV15 : 174	0,10	TCRBV05.2 : 222	0,08	TCRBV10 : 135	0,10
TCRBV03 : 163	0,05	TCRBV10 : 141	0,10	TCRBV16 : 151	0,08	TCRBV06 : 149	0,09
TCRBV10 : 135	0,05	TCRBV12 : 201	0,10	TCRBV20 : 155	0,08	TCRBV09 : 144	0,08
TCRBV02 : 158	0,05	TCRBV15 : 177	0,09	TCRBV15 : 177	0,08	TCRBV15 : 171	0,08
TCRBV12 : 207	0,05	TCRBV20 : 155	0,08	TCRBV08.2 : 228	0,08	TCRBV11 : 154	0,08
TCRBV02 : 161	0,05	TCRBV14 : 155	0,08	TCRBV03 : 153	0,08	TCRBV14 : 158	0,08
TCRBV14 : 158	0,05	TCRBV20 : 152	0,08	TCRBV13 : 165	0,07	TCRBV01 : 170	0,08
TCRBV13 : 165	0,05	TCRBV13 : 165	0,08	TCRBV20 : 149	0,07	TCRBV08.1 : 228	0,07
TCRBV15 : 177	0,04	TCRBV16 : 151	0,08	TCRBV07 : 180	0,07	TCRBV07 : 180	0,07
TCRBV04 : 195	0,04	TCRBV08.1 : 231	0,07	TCRBV14 : 155	0,06	TCRBV08.1 : 234	0,07
RBV05.1 : 231	0,04	TCRBV02 : 158	0,07	TCRBV19 : 167	0,06	TCRBV06 : 143	0,07
TCRBV20 : 152	0,04	TCRBV14 : 161	0,07	TCRBV15 : 171	0,06	TCRBV05.1 : 222	0,07
TCRBV20 : 155	0,04	TCRBV20 : 149	0,07	TCRBV08.3 : 217	0,06	TCRBV14 : 161	0,06
RBV08.2 : 228	0,04	TCRBV01 : 179	0,07	TCRBV16 : 142	0,06	TCRBV03 : 156	0,06
TCRBV01 : 173	0,04	TCRBV08.1 : 228	0,07	TCRBV09 : 150	0,06	TCRBV08.2 : 228	0,06
TCRBV06 : 146	0,04	TCRBV12 : 207	0,07	TCRBV06 : 146	0,06	TCRBV07 : 183	0,06

CaseS	GroupsS	TCRB
RT3	1	0,00
RT4	1	0,00
RT5	1	0,00
RT6	1	0,00
R11	1	0,00
R12	1	0,00
R13	1	0,00
R14	1	0,00
R15	1	0,00
RS21	2	0,00
RS22	2	0,00
RS23	2	0,00
RS24	2	0,00
RS25	2	0,00
R3*16	3	0,00
R3*17	3	0,00
R3*18	3	0,00
R3*19	3	0,00
R3*17	3	0,00
R3*S6	4	0,00
R3*S7	4	0,00
R3*S8	4	0,00
R3*S9	4	0,00
R3*S10	4	0,00
FT26	5	0,00
FT27	5	0,00
FT28	5	0,00
FT11	5	0,00
FT29	5	0,00
FT12	5	0,87
FT13	5	0,00
FT14	5	2,61
FT15	5	0,00
FS21	6	2,16
FS22	6	0,00
FS23	6	3,29
FS24	6	0,00
FS25	6	0,00
F3*16	7	0,00
F3*17	7	0,00
F3*18	7	0,00
F3*19	7	0,00
F3*20	7	0,00
F3*S1	8	0,00
F3*S2	8	0,00
F3*S3	8	0,00
F3*S4	8	0,00
F3*S5	8	0,00
F3*S6	8	0,00
F3*S7	8	0,00
F3*S8	8	0,00
F3*S9	8	0,00
F3*S10	8	0,00

Organe { F = foie
R = rate

Groupe Expérimental { T = témoin
S = directement infecté
3* = immunisé 3 fois
3*S = immunisé 3 fois, puis infecté !

FIG. 85

FIG. 86

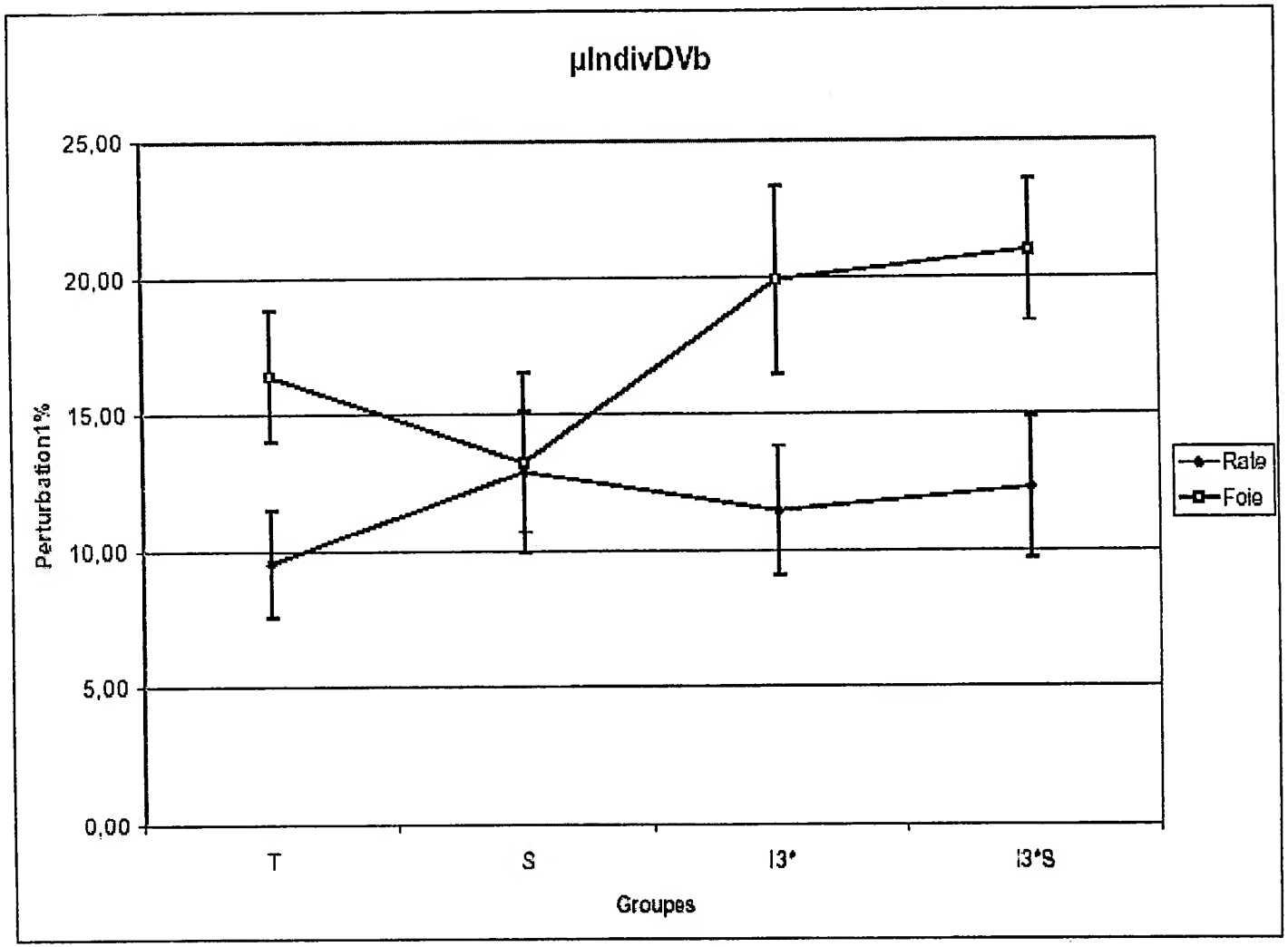

µIndivDVb
25,00
20,00
15,00
10,00
5,00
0,00
Perturbation1%
T
S
I3*
I3*S
Groupes
Rate
Foie

FIG. 87

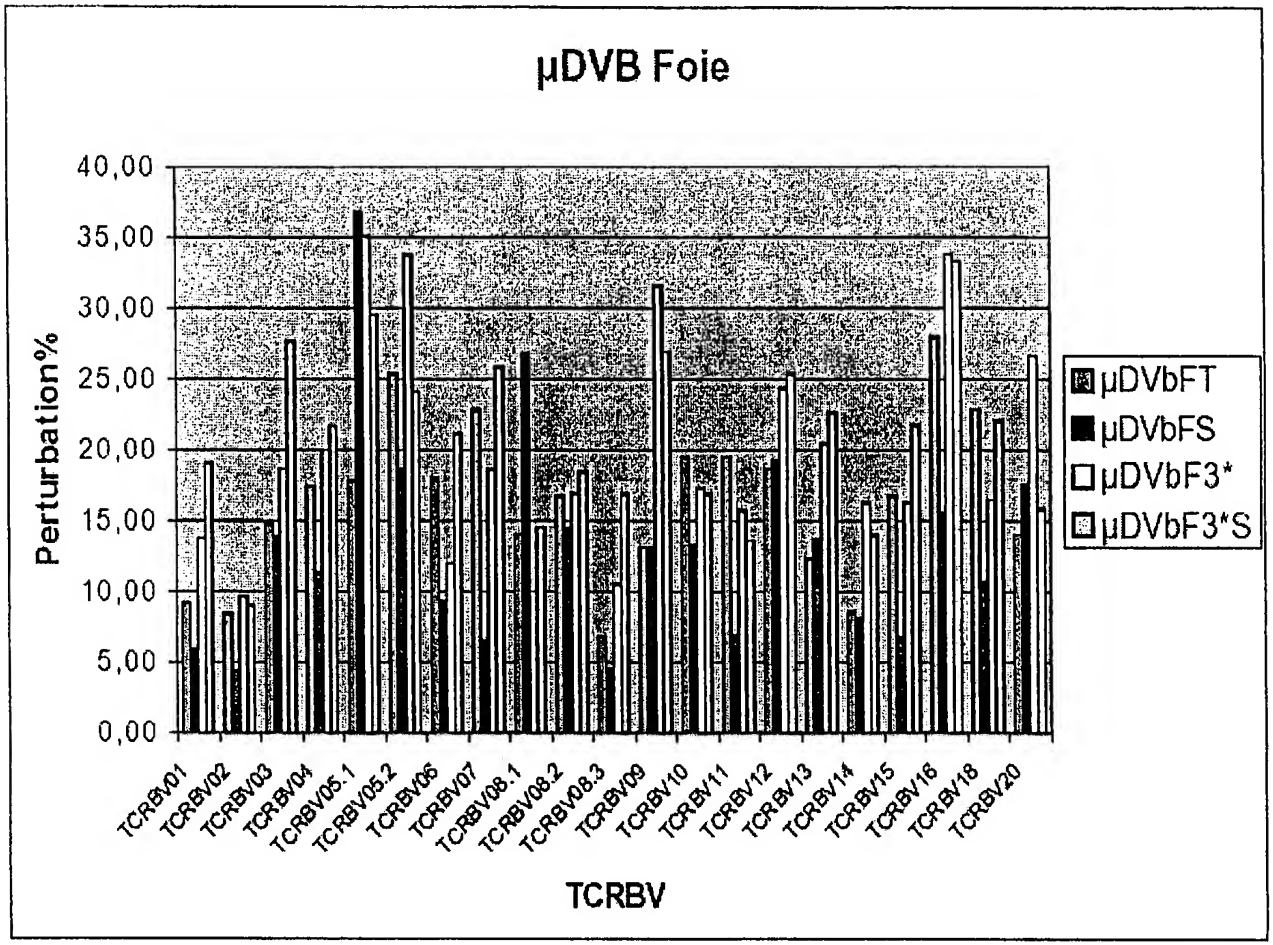

µDVB Foie
Perturbation%
40,00
35,00
30,00
25,00
20,00
15,00
10,00
5,00
0,00
TCRBV01
TCRBV02
TCRBV03
TCRBV04
TCRBV05.1
TCRBV05.2
TCRBV06
TCRBV07
TCRBV08.1
TCRBV08.2
TCRBV08.3
TCRBV09
TCRBV10
TCRBV11
TCRBV12
TCRBV13
TCRBV14
TCRBV15
TCRBV16
TCRBV18
TCRBV20
TCRBV
µDVbFT
µDVbFS
µDVbF3*
µDVbF3*S

FIG. 88

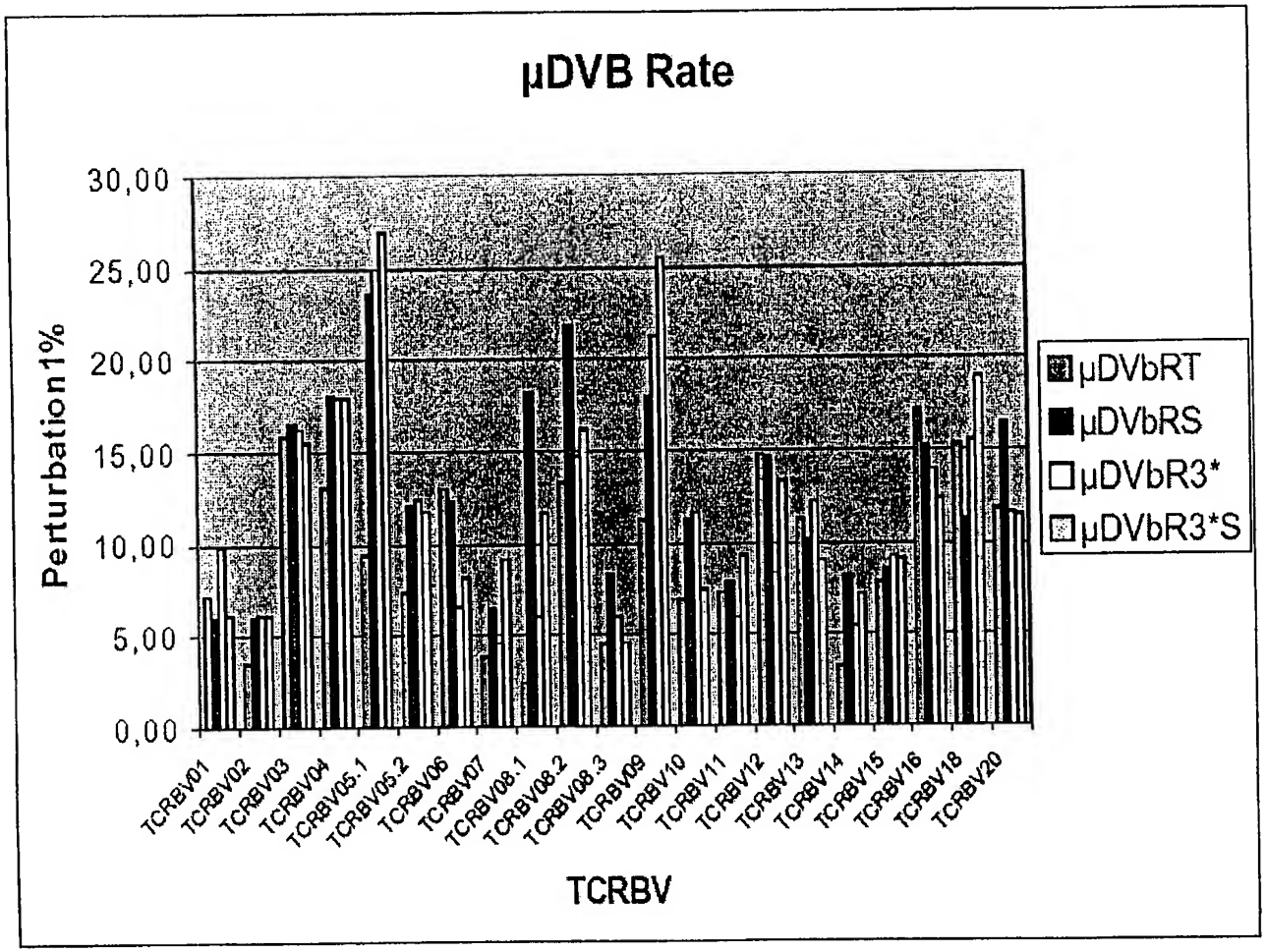

µDVB Rate
Perturbation1%
30,00
25,00
20,00
15,00
10,00
5,00
0,00
TCRBV01
TCRBV02
TCRBV03
TCRBV04
TCRBV05.1
TCRBV05.2
TCRBV06
TCRBV07
TCRBV08.1
TCRBV08.2
TCRBV08.3
TCRBV09
TCRBV10
TCRBV11
TCRBV12
TCRBV13
TCRBV14
TCRBV15
TCRBV16
TCRBV18
TCRBV20
TCRBV
µDVbRT
µDVbRS
µDVbR3*
µDVbR3*S

FIG. 89A

Tableau ANOVA pour TCRBV01

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	3	301,294	100,431	1,066	,3734	3,197	,262
Organe	1	345,472	345,472	3,668	,0621	3,668	,451
Groupe * Organe	3	277,666	92,555	,982	,4099	2,946	,243
Résidu	44	4145,699	94,248				

FIG.89B

Tableau de moyennes pour TCRBV01
Effet : Groupe * Organe

	Nombre	Moyenne	Dév. Std	Err. Std.
T, R	9	7,222	8,452	2,817
T, F	8	8,872	8,703	3,077
S, R	5	5,996	1,464	,655
S, F	5	7,907	,810	,362
13°, R	5	9,871	9,730	4,352
13°, F	5	14,806	11,284	5,046
13°S, R	5	6,113	3,748	1,676
13°S, F	10	12,010	15,238	4,819

FIG. 89C

Test PLSD de Fisher pour TCRBV01
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p
T, S	1,047	7,797	,7879
T, 13*	-4,385	7,797	,2631
T, 13*S	-6,713	8,631	,0573
S, 13*	-5,433	8,750	,2174
S, 13*S	-7,760	7,966	,0566
13*, 13*S	-2,328	7,988	,5600

FIG.89D

Test PLSD de Fisher pour TCRBV01
Effet : Organe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
R, F	-6,109	5,443	,0287	S

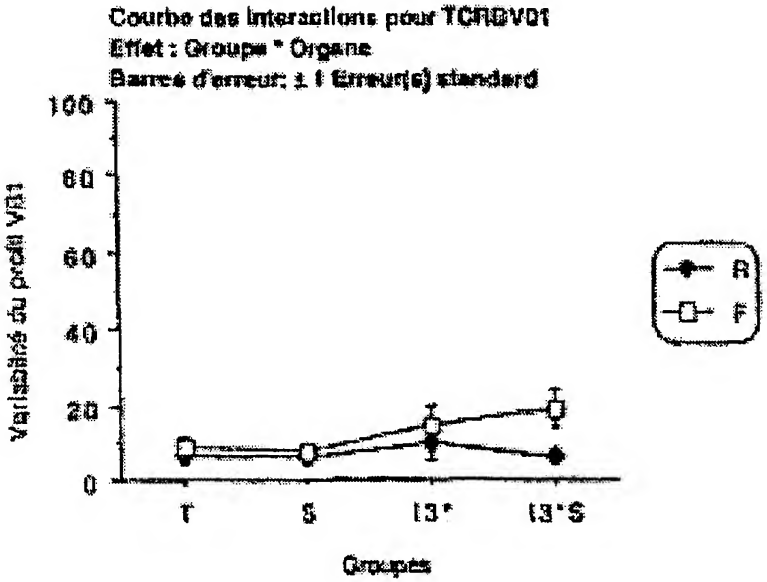


Tableau ANOVA pour TCRBV02

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	3	59,306	19,769	1,781	,1647	5,343	,422
Organe	1	113,912	113,912	10,262	,0025	10,262	,897
Groupe * Organe	3	56,871	18,957	1,708	,1792	5,123	,406
Résidu	44	488,432	11,101				

FIG. 89E

FIG. 89F

Tableau de moyennes pour TCRBV02
Effet : Groupe * Organe

	Nombre	Moyenne	Dév. Std.	Err. Std.
T, R	9	3,490	2,263	,751
T, F	9	6,657	5,551	1,963
S, R	5	6,006	2,337	1,045
S, F	5	5,307	1,484	,664
I3', R	5	6,135	1,630	,729
I3', F	5	10,072	3,968	1,775
I3'S, R	5	6,000	2,025	,906
I3'S, F	10	10,022	3,518	1,113

FIG. 89G

Test PLSD de Fisher pour TCRBV02
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p
T, S	,265	2,676	,8426
T, 13*	-2,181	2,676	,1075
T, 13*S	-2,790	2,379	,0226
S, 13*	-2,447	3,003	,1077
S, 13*S	-3,056	2,741	,0208
13*, 13*S	-,608	2,741	,6570

FIG.89H

Test PLSD de Fisher pour TCRBV02
Effet : Organe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
R, F	-3,692	1,868	,0003	S

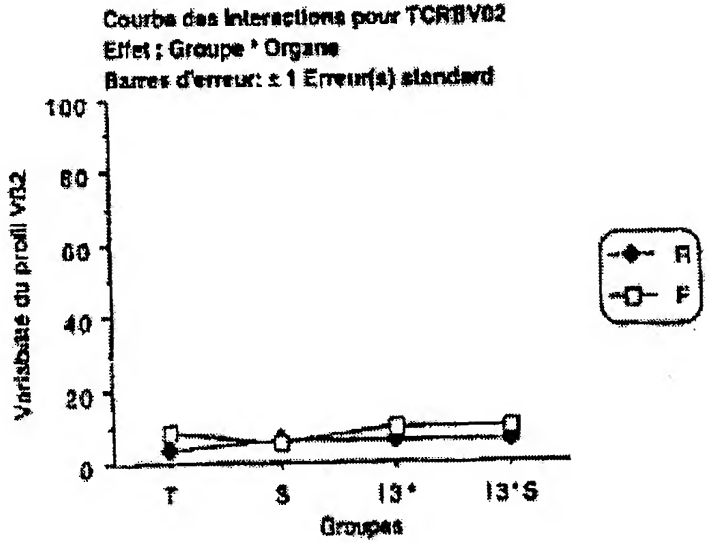


Tableau ANOVA pour TCRBV05.1

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	3	2329,744	776,581	12,456	<,0001	37,374	1,000
Organe	1	292,959	292,959	4,700	,0356	4,700	,555
Groupe * Organe	3	157,990	52,663	,845	,4768	2,535	,213
Résidu	44	2742,750	62,335				

FIG. 90A

FIG. 90B

Tableau de moyennes pour TCRBV05.1
Effet : Groupe * Organe

	Nombre	Moyenne	Dév. Std.	Err. Std.
T, R	9	9,418	9,307	3,102
T, F	8	16,356	10,547	3,729
S, R	5	23,630	4,860	2,174
S, F	5	32,058	4,573	2,045
D*, R	5	24,959	7,009	3,135
D*, F	5	30,188	6,922	3,096
D*S, R	5	26,983	5,618	2,512
D*S, F	10	26,163	8,016	2,536

FIG. 90C

Test PLSD de Fisher pour TCRBV05.1
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
T, S	-15,161	6,341	<,0001	S
T, I3*	-14,695	6,341	<,0001	S
T, I3*S	-13,753	5,637	<,0001	S
S, I3*	,285	7,116	,9405	
S, I3*S	1,408	6,496	,6644	
I3*, I3*S	1,143	6,496	,7247	

Test PLSD de Fisher pour TCRBV05.1
Effet : Organe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
R, F	-5,858	4,426	,0107	S

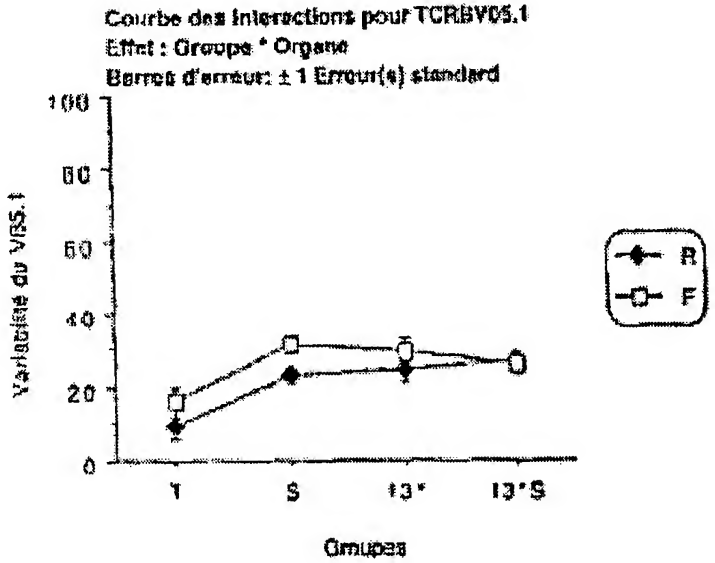


FIG. 90D

Tableau ANOVA pour TCRBV05.2

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	3	1188,456	396,152	4,396	,0088	13,185	,849
Organe	1	2230,335	2230,335	24,743	<,0001	24,743	1,000
Groupe * Organe	3	453,445	151,148	1,677	,1858	5,030	,398
Résidu	44	3966,148	90,140				

FIG. 90E

Tableau de moyennes pour TCRBV05.2
Effet : Groupe * Organe

	Nombre	Moyenne	Dév. Std.	Err. Std.
T, R	9	7,397	8,310	2,770
T, F	8	14,408	6,948	2,456
S, R	5	12,099	9,083	4,062
S, F	5	20,831	9,563	4,277
I3*, R	5	12,444	7,334	3,280
I3*, F	5	34,650	11,084	4,957
I3*S, R	5	11,758	6,884	3,078
I3*S, F	10	28,408	12,840	4,060

FIG. 90F

Test PLSD de Fisher pour TCRBV05.2
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
T, S	-5,769	7,626	,1345	
T, I3*	-12,851	7,626	,0015	S
T, I3*S	-12,165	6,778	,0008	S
S, I3*	-7,082	8,557	,1024	
S, I3*S	-6,397	7,812	,1060	
I3*, I3*S	,686	7,812	,8604	

FIG. 90G

Test PLSD de Fisher pour TCRBV05.2
Effet : Organe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
R, F	-13,831	6,323	<,0001	S

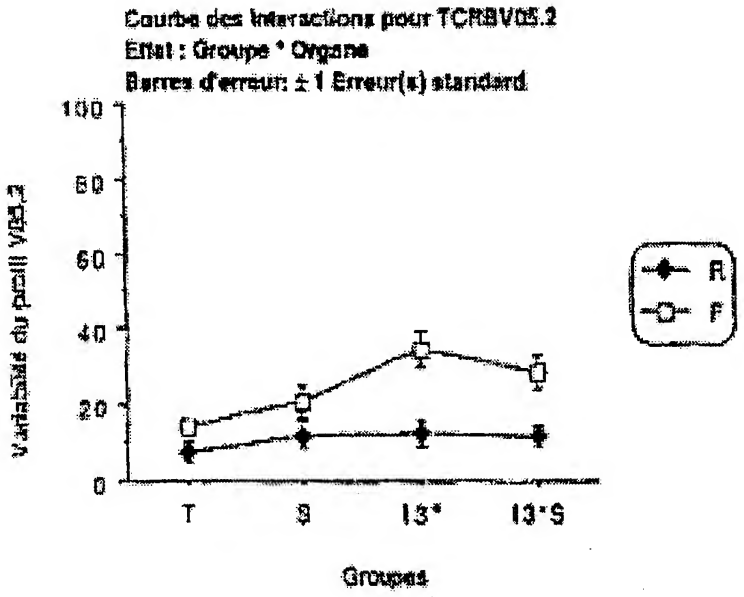


FIG. 90H

Tableau ANOVA pour TCRBV06.1

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	3	1122,156	374,053	4,322	,0092	12,965	,843
Organe	1	693,560	693,560	8,013	,0069	8,013	,803
Groupe * Organe	3	163,846	54,615	,631	,5988	1,893	,166
Résidu	45	3894,843	86,552				

FIG. 91A

Tableau de moyennes pour TCRBV08.1
Effet : Groupe * Organe

	Nombre	Moyenne	Dév. Std.	Err. Std.
T, R	9	2,401	1,210	,403
T, F	9	15,375	11,966	3,989
S, R	5	10,203	3,900	1,744
S, F	5	24,238	13,526	6,049
I3', R	5	5,982	2,536	1,134
I3', F	5	12,689	7,068	3,161
I3'S, R	5	11,682	15,553	6,955
I3'S, F	10	16,248	9,140	2,890

FIG. 91B

Test PLSD de Fisher pour TCRBV06.1
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
T, S	-12,333	7,390	,0016	S
T, [illegible]	-,448	7,390	,9034	
T, 13°S	-5,838	6,551	,0794	
S, [illegible]	11,885	8,380	,0065	S
S, 13°S	6,496	7,650	,0841	
[illegible], 13°S	-5,390	7,650	,1427	

FIG. 91C

Test PLSD de Fisher pour TCRBV08.1
Effet ; Organe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
R, F	-8,369	5,171	,0021	S

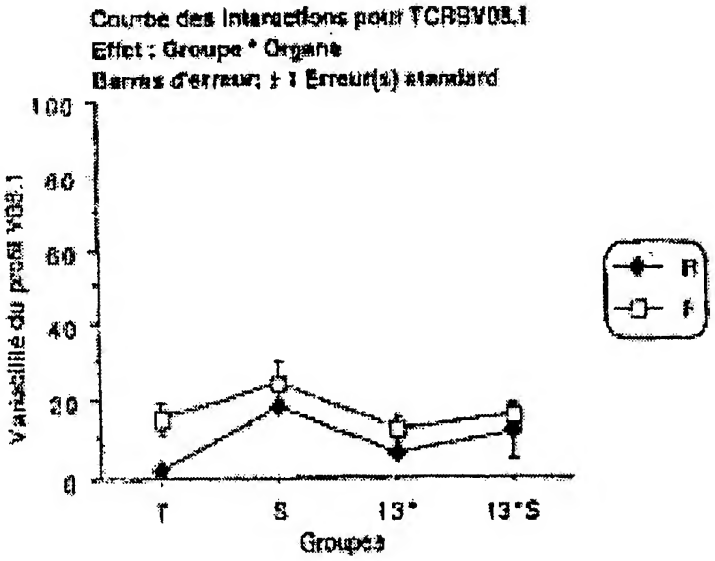


FIG. 91D

Tableau ANOVA pour TCRBV08S2

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	3	61,654	20,518	,422	,7382	1,265	,126
Organe	1	6,469	6,469	,132	,7177	,132	,064
Groupe * Organe	3	254,375	84,792	1,735	,1734	5,204	,413
Résidu	48	2199,526	48,878				

FIG. 91E

Tableau de moyennes pour TCRBV08.2
Effet : Groupe * Organe

	Nombre	Moyenne	Dév. Std.	Er. Std.
T, R	9	13,383	4,862	1,627
T, F	9	16,148	6,011	2,004
S, R	5	21,628	10,936	4,891
S, F	5	12,804	9,454	4,228
I3*, R	5	14,720	7,593	3,396
I3*, F	5	16,326	6,149	2,750
I3*S, R	5	16,190	8,697	3,889
I3*S, F	10	17,919	4,706	1,489

FIG. 91F

FIG. 91G

Test PLSD de Fisher pour TCRBV06.2
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p
T, S	-2,550	5,554	,3509
T, 13*	-,768	5,564	,7848
T, 13*S	-2,577	4,923	,2973
S, 13*	1,793	6,297	,5002
S, 13*S	-,027	5,749	,9925
13*, 13*S	-1,820	5,749	,5270

FIG. 91H

Test PLSD de Fisher pour TCRBV08.2
Effet : Organe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p
R, F	-,207	3,886	,9151

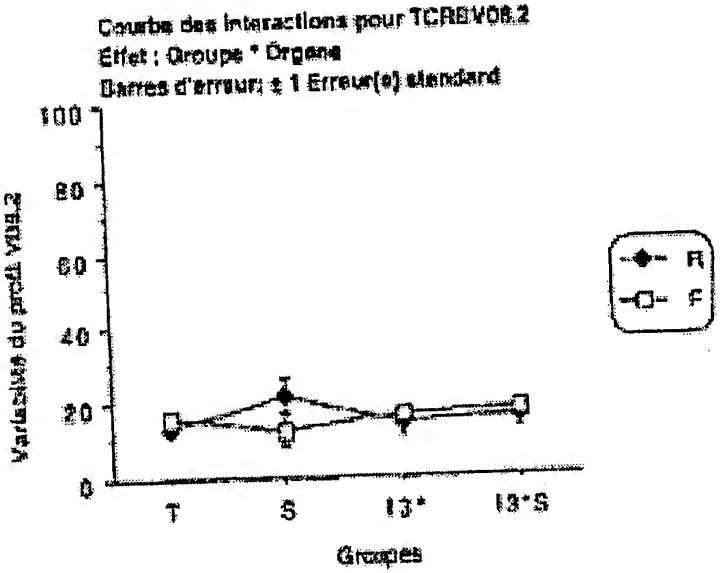


Tableau ANOVA pour TCRBV10

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	3	27,060	9,017	,181	,9085	,544	,081
Organe	1	682,292	682,292	13,724	,0006	13,724	,967
Groupe * Organe	3	115,402	38,467	,774	,5148	2,321	,198
Résidu	45	2237,141	49,714				

FIG. 92A

Tableau de moyennes pour TCRBV10
Effet : Groupe * Organe

	Nombre	Moyenne	Dév. Std.	Err. Std.
T, R	9	6,928	7,974	2,658
T, F	9	17,147	6,606	2,202
S, R	5	11,331	5,743	2,568
S, F	5	15,039	3,604	1,612
I3*, R	5	11,694	7,590	3,394
I3*, F	5	15,838	8,770	3,920
I3*S, R	5	7,509	2,533	1,133
I3*S, F	10	16,479	8,375	2,648

FIG. 92B

Test PLSD de Fisher pour TCRBV10
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p
T, S	-1,847	5,601	,5507
T, B*	-1,728	5,601	,5875
T, B*S	-2,780	4,965	,2653
S, B*	,081	6,361	,9796
S, B*S	-1,134	5,798	,6956
B*, B*S	-1,053	5,798	,7163

FIG. 92C

Test PLSD de Fisher pour TCRBV10
Effet : Organe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
R, F	-8,229	3,919	,0001	S

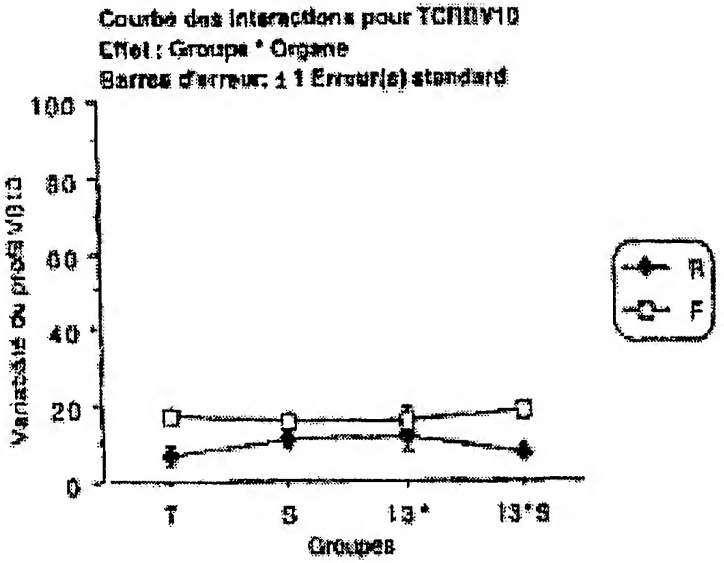


FIG. 92D

Tableau ANOVA pour TCRBV11

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	3	233,600	77,867	2,572	,0661	7,715	,680
Organe	1	2349,255	2349,255	77,562	<,0001	77,562	1,000
Groupe * Organe	3	127,530	42,510	1,403	,2544	4,210	,338
Résidu	44	1332,711	30,289				

FIG. 92E

FIG. 92F

Tableau de moyennes pour TCRBV11
Effet : Groupe * Organe

	Nombre	Moyenne	Dév. Std.	Err. Std.
T, R	9	7,353	8,354	2,785
T, F	8	16,802	4,023	1,422
S, R	5	7,885	3,981	1,780
S, F	5	21,184	2,702	1,208
I3*, R	5	5,066	1,813	,811
I3*, F	5	22,526	6,417	2,870
I3*S, R	5	9,306	3,977	1,778
I3*S, F	10	26,025	6,032	1,908

Test PLSD de Fisher pour TCRBV11
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
T, S	-2,735	4,420	,2191	
T, I3*	-2,448	4,420	,2708	
T, I3*S	-8,853	3,929	<,0001	S
S, I3*	,288	4,960	,9073	
S, I3*S	-5,918	4,528	,0116	S
I3*, I3*S	-6,206	4,528	,0083	S

FIG. 92G

Test PLSD de Fisher pour TCRBV11
Effet : Organe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
R, F	-14,319	3,085	<,0001	S

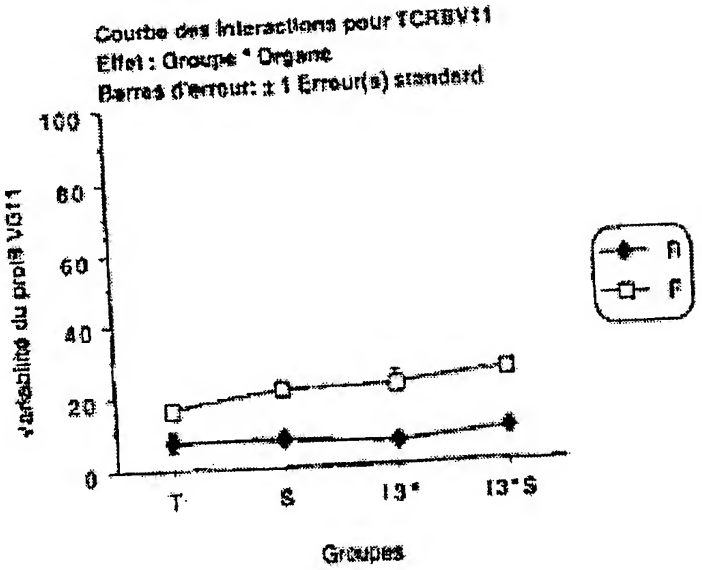


FIG. 92H

Tableau ANOVA pour TCRBV14

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	3	335,494	111,831	7,070	,0005	21,210	,978
Organe	1	411,359	411,359	26,006	<,0001	26,006	1,000
Groupe * Organe	3	231,272	77,091	4,874	,0051	14,621	,890
Résidu	45	711,807	15,818				

FIG. 93A

FIG. 93B

Tableau de moyennes pour TCRBV14
Effet : Groupe * Organe

	Nombre	Moyenne	Dév. Std.	Err. Std.
T, R	9	3,275	3,363	1,121
T, F	9	8,160	2,423	,808
S, R	5	8,190	2,726	1,219
S, F	5	6,830	1,772	,792
13*, R	5	5,434	2,510	1,123
13*, F	5	16,608	7,417	3,317
13*S, R	5	7,217	2,411	1,078
13*S, F	10	15,857	5,412	1,711

Test PLSD de Fisher pour TCRBV14
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
T, S	-1,801	3,159	,2571	
T, 13*	-5,309	3,150	,0015	S
T, 13*S	-7,264	2,800	<,0001	S
S, 13*	-3,508	3,582	,0647	
S, 13*S	-5,464	3,270	,0016	S
13*, 13*S	-1,956	3,270	,2347	

FIG. 93C

Test PLSD de Fisher pour TCRBV14
Effet : Organe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
R, F	-6,467	2,210	<,0001	S

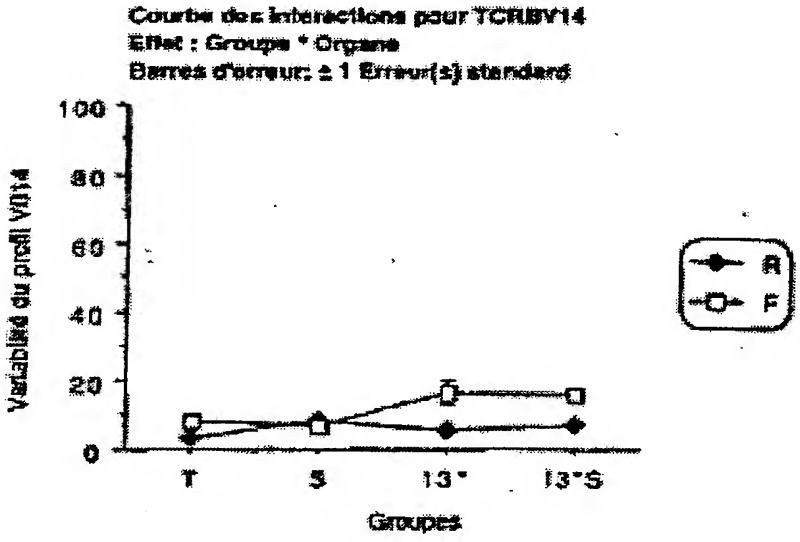


FIG. 93D

FIG. 93E

Tableau ANOVA pour TCRBV15

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	3	153,813	51,271	1,141	,3429	3,424	,278
Organe	1	1226,163	1226,163	27,289	<,0001	27,289	1,000
Groupe * Organe	3	87,328	29,109	,648	,5884	1,944	,171
Résidu	44	1976,302	44,916				

Tableau de moyennes pour TCRBV15
Effet : Groupe * Organe

	Nombre	Moyenne	Dév. Std.	Err. Std.
T, R	9	7,854	8,273	2,758
T, F	8	16,668	6,044	2,137
S, R	5	6,518	2,137	,956
S, F	5	15,284	3,618	1,618
B*, R	5	9,270	2,657	1,188
B*, F	5	20,150	11,402	5,140
B*S, R	5	9,062	4,892	2,188
B*S, F	10	23,008	7,072	2,236

FIG. 93F

est PLSD de Fisher pour TCRBV15
fiet : Groupe
iveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
T, S	,101	5,383	,9700	
T, I3*	-2,708	5,383	,3161	
T, I3*S	-6,424	4,786	,0097	S
S, I3*	-2,809	6,040	,3537	
S, I3*S	-6,525	5,514	,0215	S
I3*, I3*S	-3,716	5,514	,1814	

FIG. 93G

Test PLSD de Fisher pour TCRBV15
Effet : Organe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
R, F	-10,796	3,757	<,0001	S

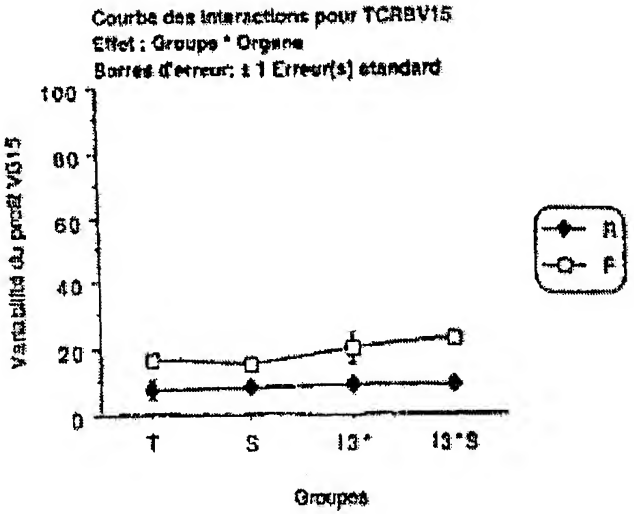


FIG. 93H

Tableau ANOVA pour TCRBV20

	ddl	Somme des carrés	Carré moyen	Valeur de F	Valeur de p	Lambda	Puissance
Groupe	3	326,663	108,888	1,907	,1423	5,722	,450
Organe	1	588,101	588,101	10,301	,0025	10,301	,888
Groupe * Organe	3	262,286	87,429	1,531	,2197	4,594	,366
Résidu	44	2512,080	57,093				

FIG. 94A

Tableau de moyennes pour TCRBV20
Effet : Groupe * Organe

	Nombre	Moyenne	Dév. Std.	Err. Std.
T, R	9	11,820	7,851	2,617
T, F	8	14,773	7,748	2,739
S, R	5	16,432	4,136	1,850
S, F	5	20,563	4,370	1,954
I3*, R	6	11,612	3,083	1,383
I3*, F	6	26,895	13,297	5,947
I3*S, R	5	11,495	4,683	2,094
I3*S, F	10	17,170	8,304	2,626

FIG. 94B

FIG. 94C

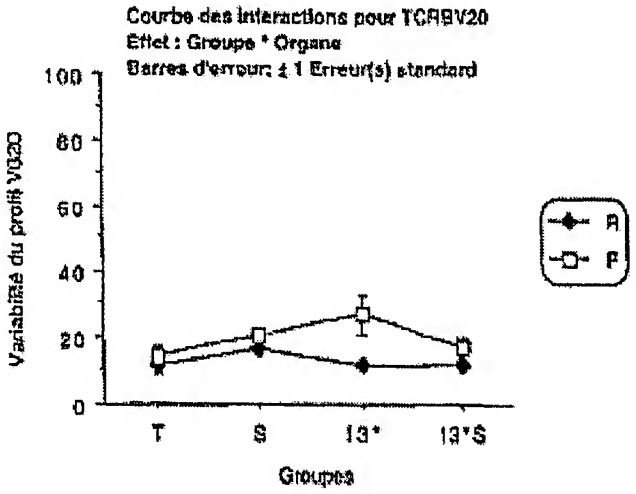
Test PLSD de Fisher pour TCRBV20
Effet : Groupe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p
T, S	-6,203	6,069	,0463
T, I3*	-6,044	6,069	,0509
T, I3*S	-2,068	5,384	,4438
S, I3*	,761	6,010	,8228
S, I3*S	3,214	6,217	,3031
I3*, I3*S	3,976	6,217	,2042

FIG. 94D

Test PLSD de Fisher pour TCRBV20
Effet : Organe
Niveau de significativité : 5 %

	Diff. moy.	Diff. crit.	Valeur p	
R, P	-6,156	4,236	,0054	S



- Seul sera détaillé ici les résultats concernant l'indice Gorochov. Les autres indices ne donnent dans cette étude aucun résultat pertinent (nature plurimodale des profils de certaines unités expérimentales).
- ❖ Le type d'infection influe en moyenne sur l'indice Gorochov observé pour les différents Vb étudiés.
- ❖ L'organe influe en moyenne sur l'indice Gorochov observée pour les différents Vb étudiés.
- ❖ L'indice Gorochov observé, en moyenne, sur les différents groupes n'est pas la même selon l'organe considéré.

Résultats de l'ANOVA correspondante : (@ : avec effet d'interaction)

	Effet groupe OUI	**Effet groupe NON**
Effet organe OUI	5.1 {F3* (222,225) FS (222,225,228)} 5.2 {RS (216) F3* (213) FS (216,219) F3*S (216)} 7 8.1 {RS (231) FS (231,228)} 8.3 @ P>>R pour le groupe I3*S. 14 @ P>>R pour les groupes I3* et I3*S.	2 6 10 {F3*S (138)} 11 12@ P>>R pour les groupes I3* et I3*S. 13 {F3*S (168)} 15 {RS (174), F3*S(177)} 16 20
Effet organe NON	3 @ F>>R pour le groupe I3*S. 9 {F3*(144,147,150,153) F3*S(153)} 18	1 4 8.2

Rq. Les Vb pour lesquels l'indice d'oligoclonalité de certains pics est supérieur au seul de celui du groupe témoin sont suivis, entre parenthèses des groupes concernés.

FIG. 95A

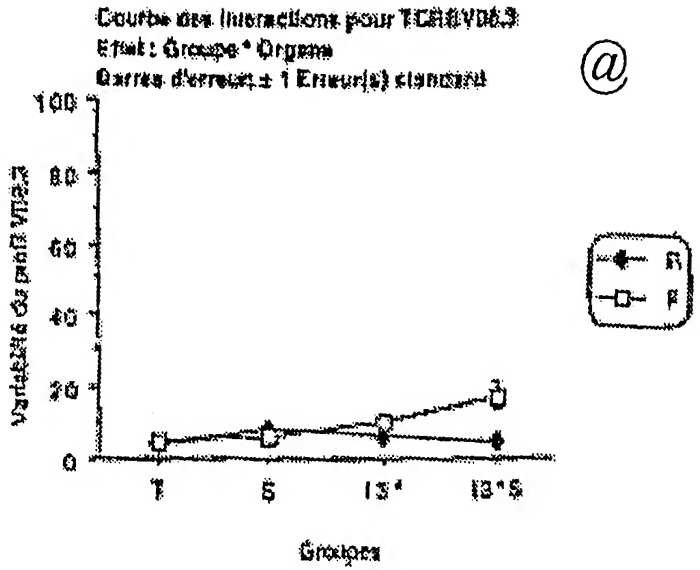

Courbe des Interactions pour TCRBV06.3
Effet : Groupe * Organe
Barres d'erreur : ± 1 Erreur(s) standard
100
80
60
40
20
0
T
5
13
13*5
Groupes

FIG. 95B

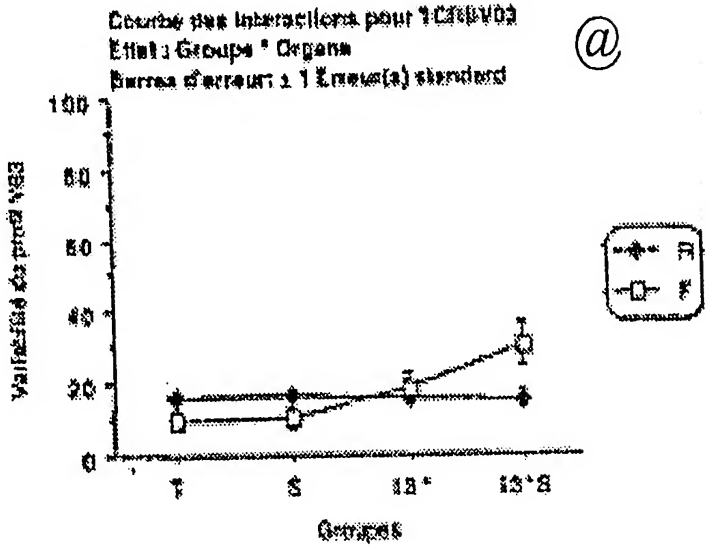
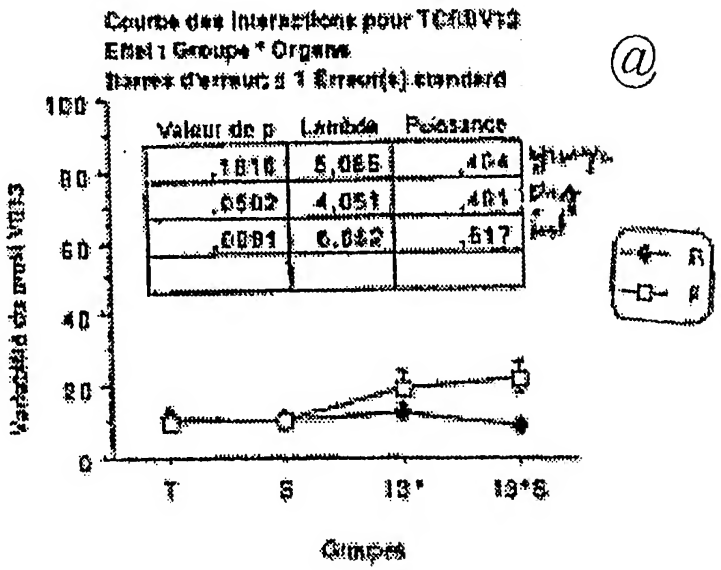


FIG. 95C

FIG. 95D


Valeur de p
Lambda
Puissance
100
80
60
40
20
0
T
S
13*
13*S
Groupes

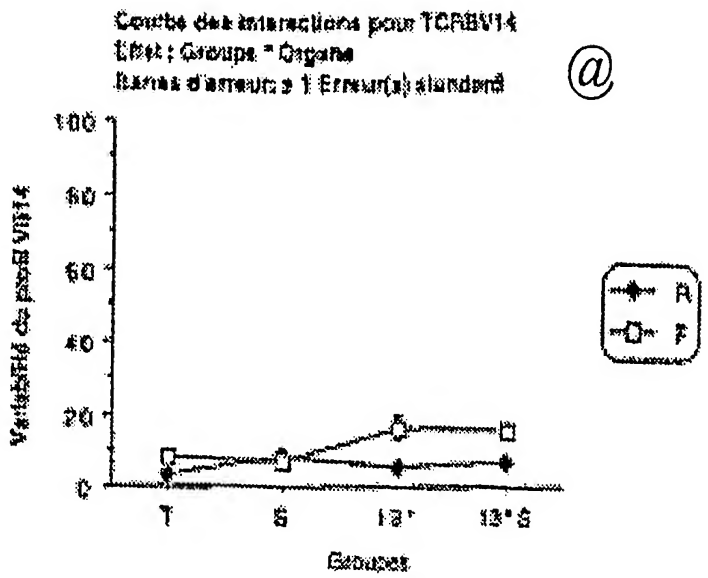

Courbe des interactions pour TCRBV14
Effet : Groupe * Organe
Barres d'erreur : 1 Erreur(s) standard
@
100
80
60
40
20
0
T
S
13*
13*S
Groupes
R
F

FIG. 95E

FIG. 95F

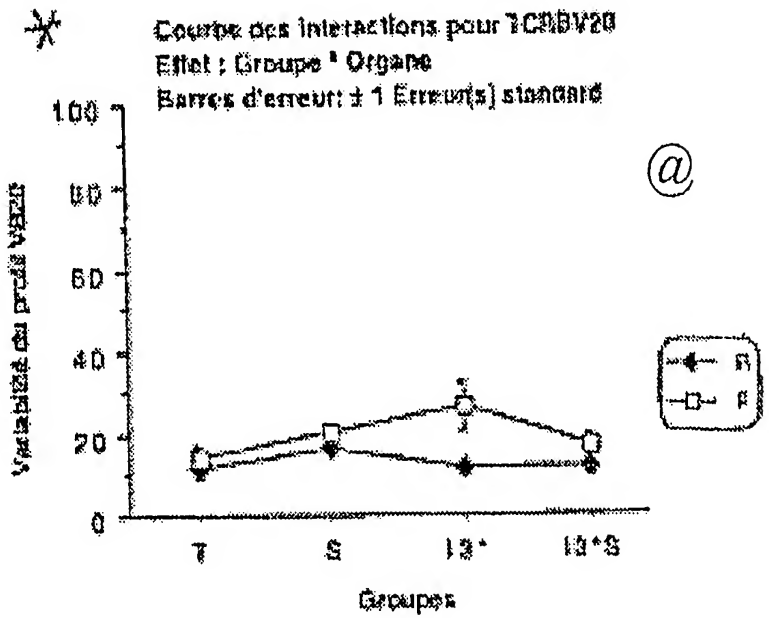

Courbe des interactions pour TCRBV20
Effet : Groupe * Organe
Barres d'erreur: ± 1 Erreur(s) standard
100
80
60
40
20
0
T
S
13*
13*S
Groupes

FIG. 95G

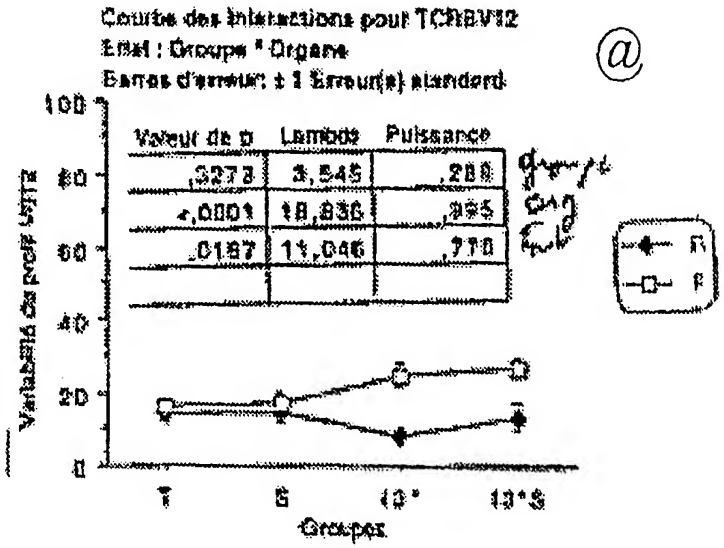
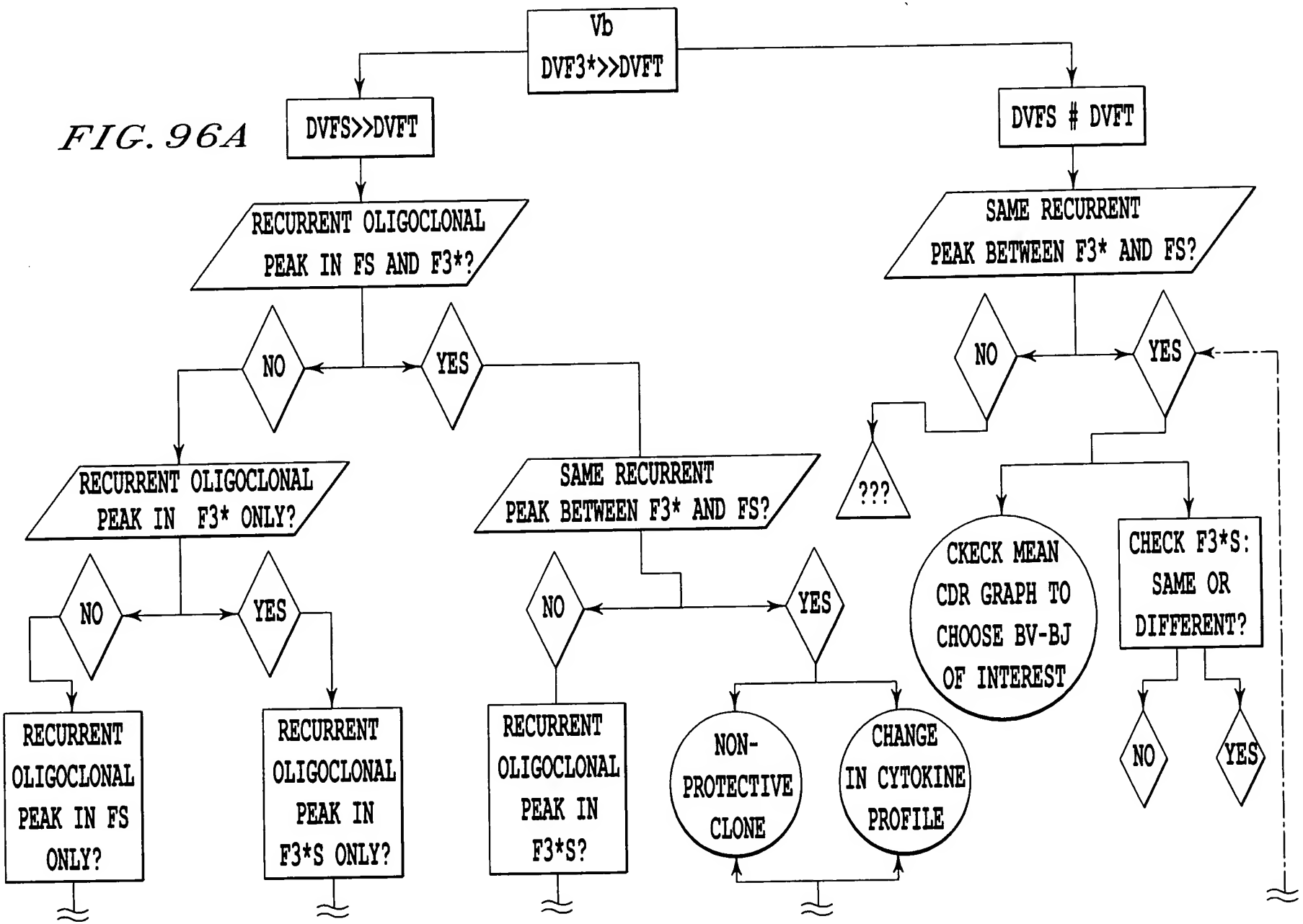

Courbe des interactions pour TCRBV12
Effet : Groupe * Organe
Barres d'erreur: ± 1 Erreur(s) standard
Valeur de p
Lambda
Puissance
,0278
3,545
,288
<,0001
18,836
,995
,0187
11,046
,770
Variabilité de poids (g)
100
80
60
40
20
0
T
S
10*
10*S
Groupes

FIG. 96A


Vb
DVF3*>>DVFT
DVFS>>DVFT
DVFS # DVFT
RECURRENT OLIGOCLONAL PEAK IN FS AND F3*?
SAME RECURRENT PEAK BETWEEN F3* AND FS?
NO
YES
NO
YES
RECURRENT OLIGOCLONAL PEAK IN F3* ONLY?
SAME RECURRENT PEAK BETWEEN F3* AND FS?
???
NO
YES
NO
YES
CKECK MEAN CDR GRAPH TO CHOOSE BV-BJ OF INTEREST
CHECK F3*S: SAME OR DIFFERENT?
RECURRENT OLIGOCLONAL PEAK IN FS ONLY?
RECURRENT OLIGOCLONAL PEAK IN F3*S ONLY?
RECURRENT OLIGOCLONAL PEAK IN F3*S?
NON-PROTECTIVE CLONE
CHANGE IN CYTOKINE PROFILE
NO
YES

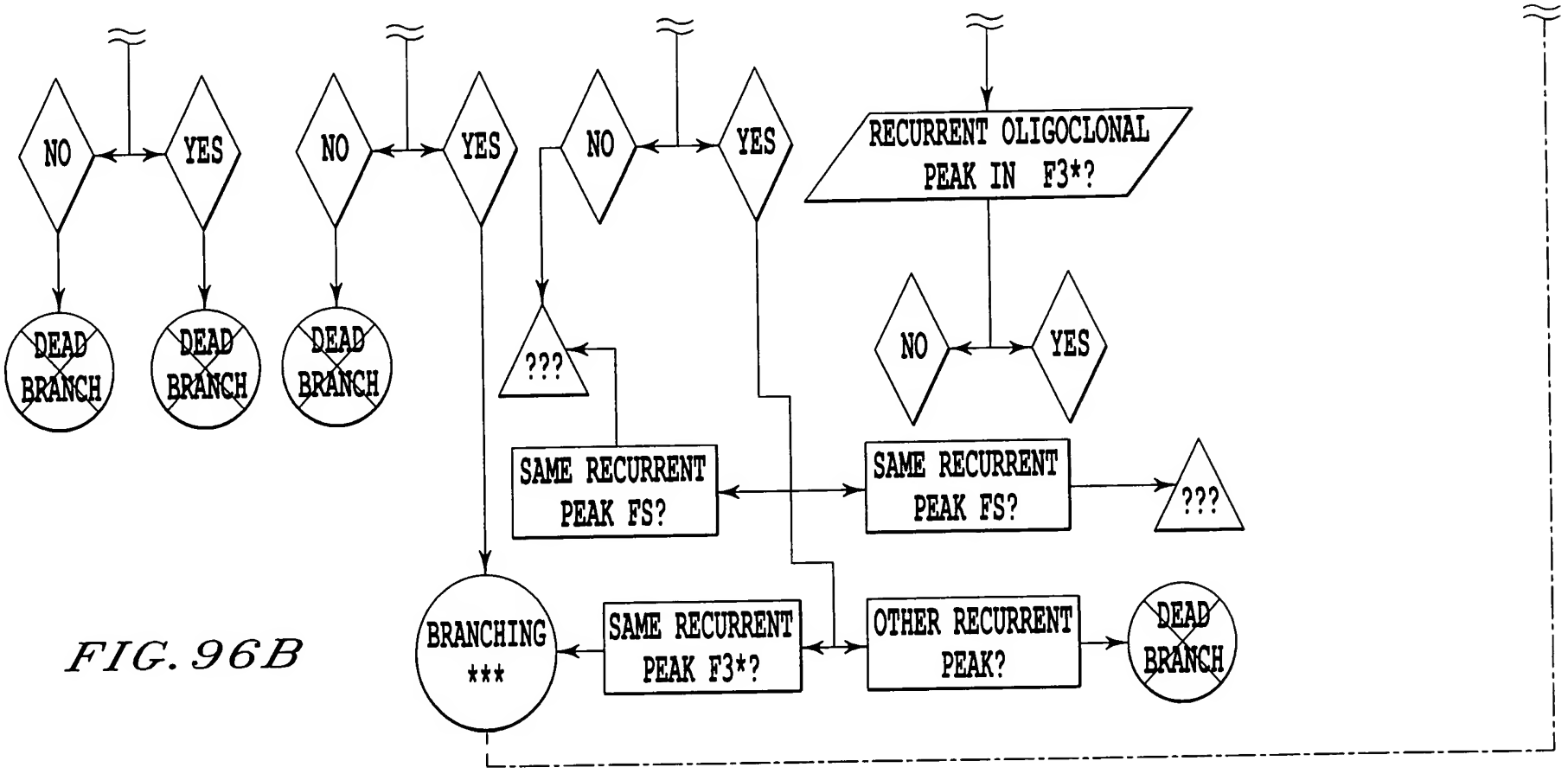

NO
YES
NO
YES
NO
YES
RECURRENT OLIGOCLONAL PEAK IN F3*?
DEAD BRANCH
DEAD BRANCH
DEAD BRANCH
???
NO
YES
SAME RECURRENT PEAK FS?
SAME RECURRENT PEAK FS?
???
BRANCHING ***
SAME RECURRENT PEAK F3*?
OTHER RECURRENT PEAK?
DEAD BRANCH

FIG. 96B

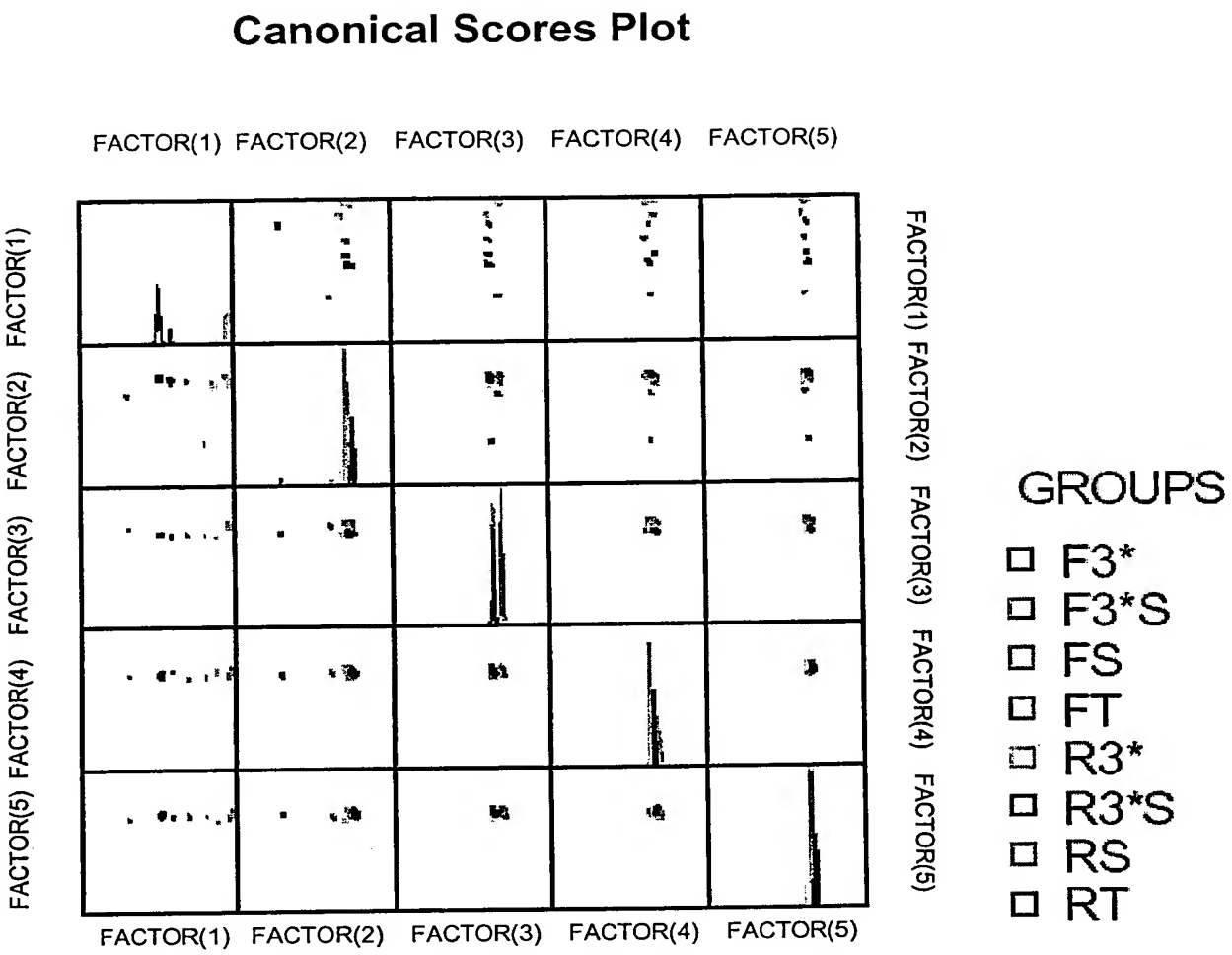

Canonical Scores Plot
FACTOR(1) FACTOR(2) FACTOR(3) FACTOR(4) FACTOR(5)
FACTOR(1) FACTOR(2) FACTOR(3) FACTOR(4) FACTOR(5)
FACTOR(1) FACTOR(2) FACTOR(3) FACTOR(4) FACTOR(5)
FACTOR(1) FACTOR(2) FACTOR(3) FACTOR(4) FACTOR(5)
GROUPS
F3*
F3*S
FS
FT
R3*
R3*S
RS
RT

FIG. 97

SYSTAT Rectangular file C:\Utilisateurs\OGp8586\Pr81OG290802.SYD,
created Thu Aug 29, 2002 at 15:24:34, contains variables:

CASE$	GROUPS$	TCRBV01_	TCRBV01_	TCRBV01_
TCRBV01_	TCRBV01_	TCRBV01_	TCRBV01_	TCRBV01_
TCRBV02_	TCRBV02_	TCRBV02_	TCRBV02_	TCRBV02_
TCRBV02_	TCRBV03_	TCRBV03_	TCRBV03_	TCRBV03_
TCRBV03_	TCRBV03_	TCRBV03_	TCRBV03_	TCRBV03_
TCRBV04_	TCRBV04_	TCRBV04_	TCRBV04_	TCRBV04_
TCRBV04_	TCRBV04_	TCRBV04_	TCRBV051_	TCRBV051_
TCRBV051_	TCRBV051_	TCRBV051_	TCRBV051_	TCRBV051_
TCRBV052_	TCRBV052_	TCRBV052_	TCRBV052_	TCRBV052_
TCRBV052_	TCRBV052_	TCRBV06_	TCRBV06_	TCRBV06_
TCRBV06_	TCRBV06_	TCRBV06_	TCRBV06_	TCRBV06_
TCRBV07_	TCRBV07_	TCRBV07_	TCRBV07_	TCRBV07_
TCRBV07_	TCRBV07_	TCRBV081_	TCRBV081_	TCRBV081_
TCRBV081_	TCRBV081_	TCRBV081_	TCRBV081_	TCRBV082_
TCRBV082_	TCRBV082_	TCRBV082_	TCRBV082_	TCRBV082_
TCRBV083_	TCRBV083_	TCRBV083_	TCRBV083_	TCRBV083_
TCRBV083_	TCRBV083_	TCRBV083_	TCRBV09_	TCRBV09_
TCRBV09_	TCRBV09_	TCRBV09_	TCRBV09_	TCRBV09_
TCRBV09_	TCRBV09_	TCRBV10_	TCRBV10_	TCRBV10_
TCRBV10_	TCRBV10_	TCRBV10_	TCRBV10_	TCRBV11_
TCRBV11_	TCRBV11_	TCRBV11_	TCRBV11_	TCRBV11_
TCRBV11_	TCRBV11_	TCRBV11_	TCRBV12_	TCRBV12_
TCRBV12_	TCRBV12_	TCRBV12_	TCRBV12_	TCRBV12_
TCRBV13_	TCRBV13_	TCRBV13_	TCRBV13_	TCRBV13_
TCRBV13_	TCRBV13_	TCRBV13_	TCRBV14_	TCRBV14_
TCRBV14_	TCRBV14_	TCRBV14_	TCRBV14_	TCRBV14_
TCRBV15_	TCRBV15_	TCRBV15_	TCRBV15_	TCRBV15_
TCRBV15_	TCRBV15_	TCRBV15_	TCRBV16_	TCRBV16_
TCRBV16_	TCRBV16_	TCRBV16_	TCRBV16_	TCRBV16_
TCRBV18_	TCRBV18_	TCRBV18_	TCRBV18_	TCRBV18_
TCRBV18_	TCRBV18_	TCRBV18_	TCRBV18_	TCRBV18_
TCRBV20_	TCRBV20_	TCRBV20_	TCRBV20_	TCRBV20_
TCRBV20_	TCRBV20_	TCRBV20_		

Latent Roots (Eigenvalues)

1	2	3	4	5
806.097	574.767	525.021	474.758	360.278
6	7	8	9	10
326.711	312.488	234.426	220.247	205.757
11	12	13	14	15
197.164	187.097	166.789	160.829	147.404
16	17	18	19	20
130.104	128.438	120.749	108.967	98.134
21	22	23	24	25

FIG.98A

FIG. 98B

90.690	78.013	76.711	61.271	59.256
26	27	28	29	30
50.362	48.663	39.763	37.130	32.355
31	32	33	34	35
29.161	26.169	24.054	21.550	20.080
36	37	38	39	40
18.509	17.875	15.007	13.936	12.903
41	42	43	44	45
11.317	9.508	8.822	8.187	7.641
46	47	48	49	50
6.640	5.734	4.707	4.103	3.624
51	52	53	54	55
3.345	2.374	0.000	0.000	0.000
56	57	58	59	60
0.000	0.000	0.000	0.000	0.000
61	62	63	64	65
0.000	0.000	0.000	0.000	0.000
66	67	68	69	70
0.000	0.000	0.000	0.000	0.000
71	72	73	74	75
0.000	0.000	0.000	0.000	0.000
76	77	78	79	80
0.000	0.000	0.000	0.000	0.000
81	82	83	84	85
0.000	0.000	0.000	0.000	0.000
86	87	88	89	90
0.000	0.000	0.000	0.000	0.000
91	92	93	94	95
0.000	0.000	0.000	0.000	0.000
96	97	98	99	100
0.000	0.000	0.000	0.000	0.000
101	102	103	104	105

FIG. 98C

0.000	0.000	0.000	0.000	0.000
106	107	108	109	110
0.000	0.000	0.000	0.000	0.000
111	112	113	114	115
0.000	0.000	0.000	0.000	0.000
116	117	118	119	120
0.000	0.000	0.000	0.000	0.000
121	122	123	124	125
0.000	0.000	0.000	0.000	0.000
126	127	128	129	130
0.000	0.000	0.000	0.000	0.000
131	132	133	134	135
0.000	0.000	0.000	0.000	0.000
136	137	138	139	140
0.000	0.000	0.000	0.000	0.000
141	142	143	144	145
0.000	0.000	0.000	0.000	0.000
146	147	148	149	150
0.000	0.000	0.000	0.000	0.000
151	152	153	154	155
0.000	0.000	0.000	0.000	0.000
156	157	158	159	160
0.000	0.000	0.000	0.000	0.000
161	162	163	164	165
0.000	0.000	0.000	0.000	0.000
166	167	168	169	170
0.000	0.000	0.000	0.000	0.000
171	172	173	174	175
0.000	0.000	0.000	0.000	0.000
176	177	178	179	180
0.000	0.000	0.000	0.000	0.000
181	182	183	184	185

FIG. 98D

	0.000	0.000	0.000	0.000	0.000
	186	187	188	189	190
	0.000	0.000	0.000	0.000	0.000
	191	192	193		
	0.000	0.000	0.000		

Component loadings

	1	2	3	4	5
TCRBV01_6	-0.075	-0.020	-0.031	0.142	0.070
TCRBV01_7	0.586	0.776	-0.084	0.178	0.101
TCRBV01_8	-2.381	-1.196	4.073	-4.774	2.594
TCRBV01_9	1.202	2.269	1.717	2.764	1.996
TCRBV01_10	3.454	2.257	2.246	1.329	1.040
TCRBV01_11	0.055	2.659	-0.708	1.386	-0.059
TCRBV01_12	-0.258	1.305	-0.889	0.074	0.185
TCRBV01_13	-0.223	0.178	-0.392	0.102	-0.044
TCRBV01_14	-0.021	0.016	-0.050	0.010	-0.016
TCRBV02_6	0.750	-0.283	-0.629	-0.090	-0.108
TCRBV02_7	0.480	0.642	0.637	-0.136	-0.988
TCRBV02_8	0.059	0.586	0.088	0.089	0.736
TCRBV02_9	1.130	0.110	0.203	0.181	-1.461
TCRBV02_10	-0.113	-0.187	0.290	-0.738	0.606
TCRBV02_11	-0.724	-0.097	1.786	-0.013	0.307
TCRBV02_12	-0.450	-0.019	0.601	-0.160	0.175
TCRBV02_13	-0.236	-0.160	0.201	-0.296	0.196
TCRBV03_4	-0.023	-0.015	-0.082	0.030	0.014
TCRBV03_5	-0.120	-0.002	-0.121	-0.003	0.061
TCRBV03_6	2.225	0.178	-0.733	-1.112	0.066
TCRBV03_7	2.053	1.677	-0.686	-0.785	0.612
TCRBV03_8	3.224	2.522	-0.052	-1.015	1.279
TCRBV03_9	4.341	2.926	-1.482	-0.044	1.981
TCRBV03_10	-3.235	0.499	3.479	-1.136	4.894
TCRBV03_11	-5.143	0.869	1.720	2.027	0.546
TCRBV03_12	-0.448	0.066	1.408	1.085	-1.392
TCRBV03_13	-0.536	-0.476	2.430	2.163	-2.194
TCRBV04_6	0.012	-0.001	-0.019	-0.011	0.005
TCRBV04_7	1.152	-0.155	-0.030	-0.668	0.049
TCRBV04_8	1.873	0.011	0.527	-0.928	0.155
TCRBV04_9	4.587	-1.410	0.450	-1.396	0.161
TCRBV04_10	5.214	-0.729	-0.519	-0.539	1.093
TCRBV04_11	-2.756	0.589	-1.756	1.854	-0.619
TCRBV04_12	-3.817	0.894	-0.456	1.589	1.304
TCRBV04_13	-3.121	1.805	0.381	2.556	-2.504
TCRBV04_14	-3.131	-1.158	1.410	-2.431	0.426
TCRBV04_15	-0.012	0.154	0.012	-0.025	-0.070
TCRBV051_5	0.174	0.196	-0.112	-0.095	0.048
TCRBV051_6	0.215	-0.029	0.032	0.178	0.642
TCRBV051_7	-0.042	-0.512	-0.317	-0.818	1.006
TCRBV051_8	5.708	-11.263	7.492	6.584	0.181
TCRBV051_9	0.294	1.095	-1.810	3.037	-1.682
TCRBV051_10	-0.617	5.252	-3.907	-2.022	-1.555
TCRBV051_11	-2.015	2.799	2.297	-6.363	-1.086
TCRBV051_12	-0.959	3.191	-0.695	-1.023	-0.729
TCRBV051_13	0.084	0.240	-0.060	-0.185	-0.127
TCRBV052_6	0.340	0.857	-0.295	-0.436	-0.045
TCRBV052_7	0.742	2.607	0.258	0.375	-0.707
TCRBV052_8	-2.966	5.924	6.078	3.420	-3.444
TCRBV052_9	1.864	-0.893	1.072	-0.675	0.061

TCRBV052_10	1.482	-2.328	-2.449	-0.869	-0.364
TCRBV052_11	1.183	-2.592	-0.353	-1.828	1.509
TCRBV052_12	0.184	-2.206	-1.170	-0.621	0.008
TCRBV052_13	0.013	-0.400	-0.221	-0.073	-0.320
TCRBV06_5	0.028	0.045	-0.011	-0.063	-0.023
TCRBV06_6	0.893	0.443	-0.309	0.021	0.249
TCRBV06_7	2.017	1.415	0.546	0.161	-0.133
TCRBV06_8	2.766	1.952	1.966	0.511	0.512
TCRBV06_9	3.375	1.408	2.821	-3.418	2.216
TCRBV06_10	-2.099	2.397	-0.216	1.039	1.658
TCRBV06_11	-2.924	1.046	1.312	1.670	0.587
TCRBV06_12	-1.604	-0.326	-0.042	1.137	0.619
TCRBV06_13	-0.114	-0.137	-0.185	0.152	0.181
TCRBV07_5	0.008	0.028	-0.008	-0.007	-0.006
TCRBV07_6	0.837	0.060	1.858	1.278	-1.079
TCRBV07_7	1.214	-0.479	3.067	-1.119	-0.853
TCRBV07_8	1.397	2.345	0.393	0.465	1.264
TCRBV07_9	4.717	2.550	2.366	-0.826	1.030
TCRBV07_10	-0.442	2.391	-0.665	0.761	3.003
TCRBV07_11	-3.185	0.834	-0.280	0.043	1.876
TCRBV07_12	-1.960	0.518	-0.716	0.657	0.453
TCRBV07_13	-0.246	-0.005	-0.134	-0.042	0.180
TCRBV081_5	-0.014	-0.039	0.066	0.071	0.088
TCRBV081_6	-0.233	0.804	-0.102	-0.341	0.688
TCRBV081_7	0.704	-0.501	0.138	-0.835	2.223
TCRBV081_8	0.540	-0.086	1.200	0.121	0.646
TCRBV081_9	3.830	-4.333	-0.332	-1.541	-0.526
TCRBV081_10	-1.574	1.153	-1.559	2.277	-1.302
TCRBV081_11	-2.194	2.038	0.379	0.551	-0.926
TCRBV081_12	-1.059	0.963	0.211	-0.303	-0.892
TCRBV082_4	0.424	-0.358	-0.028	-0.768	-0.292
TCRBV082_5	1.519	-1.085	-0.387	-2.354	-0.715
TCRBV082_6	1.924	-0.687	0.185	-1.745	-0.622
TCRBV082_7	4.198	-2.368	1.356	-4.012	-2.978
TCRBV082_8	-1.227	1.076	-0.107	1.819	-0.476
TCRBV082_9	-3.201	2.555	-0.558	3.505	2.871
TCRBV082_10	-2.699	0.852	-0.631	2.618	1.452
TCRBV082_11	-0.938	0.015	0.169	0.937	0.760
TCRBV083_4	-0.014	-0.041	0.169	0.163	-0.147
TCRBV083_5	-0.068	0.075	0.105	-0.232	-0.108
TCRBV083_6	0.507	-0.204	-0.849	-0.544	-0.608
TCRBV083_7	-0.108	-0.302	1.102	-0.398	1.583
TCRBV083_8	0.297	0.863	0.017	-1.155	1.218
TCRBV083_9	0.473	0.115	-1.272	0.152	0.523
TCRBV083_10	-0.565	0.494	-0.172	0.803	-0.014
TCRBV083_11	-0.472	-0.205	1.392	0.772	-1.418
TCRBV083_12	-0.050	-0.797	-0.492	0.439	-1.028
TCRBV09_5	-0.130	-0.039	0.139	0.133	0.079
TCRBV09_6	0.040	-0.080	-0.402	0.148	0.444
TCRBV09_7	0.934	-0.535	-0.164	-0.246	2.171
TCRBV09_8	0.369	-0.995	2.707	4.763	4.320
TCRBV09_9	2.212	-0.760	4.327	2.838	3.010
TCRBV09_10	2.774	3.177	0.449	-2.120	3.543
TCRBV09_11	-1.487	2.603	6.703	-3.932	-5.167
TCRBV09_12	-0.264	3.204	-0.360	-1.573	-1.144
TCRBV09_13	0.317	0.847	-0.183	-0.596	-0.481
TCRBV09_14	0.100	0.111	-0.013	-0.204	-0.066
TCRBV09_15	0.090	-0.012	0.013	-0.019	-0.014
TCRBV10_6	0.486	0.626	-0.103	-0.518	-0.360
TCRBV10_7	0.830	1.733	1.173	1.028	-1.646
TCRBV10_8	1.789	1.616	-0.162	0.700	-0.176
TCRBV10_9	-3.735	-1.632	0.512	-2.124	0.498
TCRBV10_10	-0.813	-1.518	0.188	0.424	0.368
TCRBV10_11	1.331	-0.607	-0.813	0.275	0.931

FIG. 99A

TCRBV10_12	0.123	-0.210	-0.756	0.200	0.378
TCRBV10_13	-0.011	-0.007	-0.040	0.015	0.007
TCRBV11_5	0.054	-0.171	-0.024	0.112	0.227
TCRBV11_6	0.645	0.491	0.188	-0.714	0.376
TCRBV11_7	1.025	1.292	1.255	0.194	-0.196
TCRBV11_8	0.761	1.916	2.296	-1.473	-0.143
TCRBV11_9	3.448	1.820	5.538	-0.829	0.968
TCRBV11_10	-0.317	1.741	0.140	1.767	1.806
TCRBV11_11	-1.405	1.169	-1.376	0.594	1.496
TCRBV11_12	-1.177	0.105	-1.167	1.265	0.817
TCRBV11_13	-0.626	-0.073	-0.722	0.205	0.474
TCRBV11_14	-0.051	-0.033	-0.180	0.066	0.030
TCRBV11_15	-0.019	-0.012	-0.067	0.024	0.011
TCRBV12_4	-0.057	0.257	0.160	0.162	-0.221
TCRBV12_5	1.293	0.663	2.995	0.630	-3.022
TCRBV12_6	2.748	1.366	1.113	-1.987	1.080
TCRBV12_7	3.631	0.361	0.059	-2.201	1.916
TCRBV12_8	1.486	-0.394	-3.294	-0.997	0.698
TCRBV12_9	-4.150	-1.433	-2.887	2.225	-0.539
TCRBV12_10	-1.210	-0.525	1.600	1.272	-0.263
TCRBV12_11	-3.118	-0.274	0.050	0.649	0.371
TCRBV12_12	-0.622	-0.022	0.204	0.248	-0.021
TCRBV13_5	-0.020	-0.007	-0.107	0.019	0.053
TCRBV13_6	0.236	0.737	0.059	-1.254	-0.553
TCRBV13_7	1.220	-0.566	-1.444	-1.137	2.591
TCRBV13_8	1.117	-0.003	-1.307	0.057	1.241
TCRBV13_9	0.093	0.101	4.513	4.666	-4.488
TCRBV13_10	-2.026	0.461	-0.842	-1.267	1.472
TCRBV13_11	-0.556	-0.611	-0.561	-1.254	-0.605
TCRBV13_12	-0.312	-0.035	-0.263	0.081	0.148
TCRBV13_13	0.248	-0.076	-0.048	0.088	0.140
TCRBV14_5	0.002	0.043	0.128	-0.072	-0.191
TCRBV14_6	0.560	-0.013	-0.866	-0.723	0.361
TCRBV14_7	-0.886	0.111	0.110	-0.734	-0.876
TCRBV14_8	2.788	-0.379	-0.601	-0.066	-0.369
TCRBV14_9	0.982	-0.783	-0.866	3.516	0.367
TCRBV14_10	-1.647	0.192	1.058	-1.735	0.565
TCRBV14_11	-1.420	0.784	1.203	-0.363	-0.069
TCRBV14_12	-0.314	0.072	-0.065	0.145	0.144
TCRBV14_13	-0.064	-0.026	-0.101	0.031	0.067
TCRBV15_4	-0.048	0.005	-0.098	0.069	0.058
TCRBV15_5	0.876	-1.126	-0.311	0.027	1.451
TCRBV15_6	1.635	0.164	0.742	-0.557	1.197
TCRBV15_7	2.958	1.462	1.759	0.217	1.348
TCRBV15_8	4.711	2.103	2.764	0.244	1.387
TCRBV15_9	-1.609	3.526	3.496	0.975	-0.027
TCRBV15_10	-3.220	1.441	-1.397	0.340	0.671
TCRBV15_11	-2.089	0.535	-1.100	0.108	-0.046
TCRBV15_12	-0.876	0.132	0.026	-0.212	-0.172
TCRBV16_5	-0.004	0.063	0.143	0.057	-0.221
TCRBV16_6	0.740	-0.458	0.685	0.961	0.315
TCRBV16_7	4.029	0.612	0.870	0.467	0.419
TCRBV16_8	5.524	3.170	-1.084	0.257	-1.066
TCRBV16_9	6.852	5.592	-1.963	1.947	-1.891
TCRBV16_10	0.165	3.517	0.669	2.334	-1.033
TCRBV16_11	-3.812	-1.117	3.607	1.146	4.580
TCRBV16_12	-8.256	-2.143	5.834	-6.750	1.526
TCRBV16_13	-0.058	-0.024	0.040	0.085	-0.063
TCRBV18_3	0.030	-0.017	-0.003	-0.005	0.009
TCRBV18_4	0.043	-0.147	0.188	-0.730	0.278
TCRBV18_5	0.125	0.793	1.558	-0.021	-0.578
TCRBV18_6	-1.454	1.826	3.098	-1.120	-0.762
TCRBV18_7	-0.152	3.168	2.247	1.449	1.188

FIG. 99B

TCRBV18_8	1.814	5.078	-0.855	-0.154	3.140
TCRBV18_9	-1.031	1.918	0.229	1.614	3.512
TCRBV18_10	-0.094	1.019	-0.043	1.279	1.501
TCRBV18_11	-0.786	-0.011	-0.531	0.647	1.080
TCRBV18_12	-0.061	0.022	0.078	0.163	-0.112
TCRBV18_13	0.049	-0.009	-0.017	-0.010	0.025
TCRBV20_5	0.006	-0.081	0.103	0.066	0.252
TCRBV20_6	0.820	-0.019	0.545	0.203	-0.182
TCRBV20_7	1.733	0.721	0.380	0.515	-0.112
TCRBV20_8	3.344	1.243	1.094	-0.664	0.208
TCRBV20_9	3.148	2.159	1.851	1.730	1.856
TCRBV20_10	-0.717	3.433	1.768	-1.723	0.168
TCRBV20_11	-3.744	1.517	1.836	0.103	0.433
TCRBV20_12	-1.968	0.750	-0.669	0.580	0.447
TCRBV20_13	-0.245	-1.482	-0.948	0.345	2.751
TCRBV20_14	-0.039	0.004	-0.079	0.056	0.047

	6	7	8	9	10
TCRBV01_6	0.021	-0.137	-0.052	-0.005	-0.092
TCRBV01_7	-0.643	0.055	0.055	0.226	0.238
TCRBV01_8	0.786	-2.649	0.542	2.361	-0.491
TCRBV01_9	0.085	0.952	-0.612	2.294	0.205
TCRBV01_10	-0.117	1.597	-0.377	-1.762	-0.096
TCRBV01_11	2.327	0.810	0.368	-1.797	1.295
TCRBV01_12	0.734	0.415	-0.371	-0.381	0.648
TCRBV01_13	0.489	-0.254	0.165	-0.219	0.124
TCRBV01_14	0.075	-0.054	0.026	-0.037	-0.002
TCRBV02_6	-0.411	-0.685	-0.233	0.366	0.110
TCRBV02_7	-0.375	-0.363	0.367	0.450	-0.673
TCRBV02_8	-1.359	-0.407	-0.058	-0.717	0.158
TCRBV02_9	-0.206	0.488	-2.104	0.418	0.067
TCRBV02_10	-1.294	-0.476	-0.688	-0.459	0.204
TCRBV02_11	-0.075	0.083	0.450	0.138	-0.089
TCRBV02_12	0.488	0.385	-0.049	0.021	-0.524
TCRBV02_13	0.142	-0.078	0.275	0.192	0.082
TCRBV03_4	0.080	0.027	0.053	-0.011	0.017
TCRBV03_5	0.060	0.097	0.112	-0.004	-0.062
TCRBV03_6	-0.107	1.055	-0.342	0.821	-0.548
TCRBV03_7	0.146	1.148	-0.772	0.402	-0.358
TCRBV03_8	0.035	1.190	-1.144	2.683	-0.290
TCRBV03_9	0.647	1.593	-1.654	1.464	0.050
TCRBV03_10	2.574	-2.731	1.180	-0.028	-0.095
TCRBV03_11	1.653	-1.677	-2.411	-1.695	2.068
TCRBV03_12	0.457	0.061	1.460	-1.841	0.257
TCRBV03_13	-1.787	-0.027	3.263	-1.111	0.788
TCRBV04_6	0.037	0.015	0.031	0.040	0.044
TCRBV04_7	-0.299	0.208	-0.066	0.153	0.939
TCRBV04_8	0.213	0.582	-0.761	-0.070	1.250
TCRBV04_9	-0.141	1.267	-0.328	-1.489	1.663
TCRBV04_10	-0.590	0.912	-0.715	-1.192	0.128
TCRBV04_11	0.112	-0.805	0.930	-0.875	-1.657
TCRBV04_12	0.160	0.155	0.849	0.034	-2.181
TCRBV04_13	0.079	-0.716	-0.245	3.168	-0.196
TCRBV04_14	0.515	-1.584	0.155	0.054	0.211
TCRBV04_15	-0.087	-0.034	0.150	0.177	-0.200
TCRBV051_5	-0.106	0.048	0.089	-0.068	0.171
TCRBV051_6	0.029	0.318	0.252	-0.142	0.301
TCRBV051_7	-0.159	0.221	0.309	0.500	1.070
TCRBV051_8	2.572	-2.042	-2.164	0.044	-0.762
TCRBV051_9	4.444	-1.496	-0.137	2.643	-0.465
TCRBV051_10	-1.104	-0.084	0.969	1.300	-1.749
TCRBV051_11	-0.987	0.698	2.606	-1.346	-0.209
TCRBV051_12	-1.048	0.469	-0.142	0.044	-1.542

FIG. 99C

TCRBV051_13	-0.111	0.030	0.013	-0.028	0.073
TCRBV052_6	-0.429	-0.125	0.159	0.032	-0.196
TCRBV052_7	-1.586	-1.674	-0.624	0.571	-0.045
TCRBV052_8	-4.403	-0.485	-3.190	0.378	0.467
TCRBV052_9	1.889	-2.483	-0.890	2.997	-5.603
TCRBV052_10	2.085	-1.036	1.997	0.374	0.520
TCRBV052_11	3.685	2.322	3.163	-1.554	1.262
TCRBV052_12	2.094	1.373	1.268	0.039	0.557
TCRBV052_13	0.194	0.267	-0.089	0.109	-0.072
TCRBV06_5	-0.028	0.012	-0.015	-0.010	0.028
TCRBV06_6	-0.054	-0.562	0.235	0.175	-0.085
TCRBV06_7	-0.102	-0.502	0.664	0.892	-0.794
TCRBV06_8	-1.117	0.072	1.946	-0.955	0.019
TCRBV06_9	3.021	-2.951	1.747	-1.565	-0.637
TCRBV06_10	2.419	1.433	-1.640	-0.765	1.583
TCRBV06_11	-0.259	1.838	-1.574	1.468	1.021
TCRBV06_12	-0.036	1.358	-1.405	1.428	0.635
TCRBV06_13	-0.086	0.037	-0.213	0.012	0.059
TCRBV07_5	-0.005	-0.002	0.019	0.017	-0.024
TCRBV07_6	-0.827	-0.235	1.877	-0.943	1.078
TCRBV07_7	3.084	0.756	-0.478	-1.146	0.282
TCRBV07_8	-1.780	-0.387	-1.115	2.083	1.386
TCRBV07_9	0.335	-2.246	-0.097	0.479	-1.363
TCRBV07_10	1.901	1.229	-1.259	-0.785	0.280
TCRBV07_11	1.186	0.419	0.927	0.775	0.062
TCRBV07_12	0.030	1.034	-0.156	0.279	0.165
TCRBV07_13	-0.167	0.167	0.027	-0.079	-0.040
TCRBV081_5	-0.009	0.090	0.005	-0.140	0.041
TCRBV081_6	-0.289	0.625	1.094	-0.524	0.273
TCRBV081_7	-1.016	2.906	1.137	-0.857	-0.546
TCRBV081_8	-1.066	2.816	0.724	-0.342	-0.803
TCRBV081_9	-2.867	0.115	-1.058	-0.081	-0.371
TCRBV081_10	3.775	-5.061	-0.414	0.308	0.164
TCRBV081_11	1.486	-1.138	-0.736	0.953	0.983
TCRBV081_12	-0.015	-0.355	-0.752	0.683	0.259
TCRBV082_4	0.055	-0.029	0.046	-0.051	0.638
TCRBV082_5	-0.344	-0.203	-0.521	0.137	1.641
TCRBV082_6	-0.074	-0.440	-0.570	0.468	1.114
TCRBV082_7	0.263	-0.594	-0.517	-0.195	2.755
TCRBV082_8	0.554	-0.492	-0.254	0.195	-1.583
TCRBV082_9	0.305	0.673	0.717	-0.634	-2.363
TCRBV082_10	-0.735	0.388	0.784	0.019	-1.785
TCRBV082_11	-0.024	0.696	0.315	0.061	-0.418
TCRBV083_4	-0.131	0.003	0.257	-0.085	0.044
TCRBV083_5	-0.025	-0.087	-0.036	0.450	0.165
TCRBV083_6	0.327	-0.057	0.164	0.304	-0.026
TCRBV083_7	0.946	0.272	1.107	-1.423	-0.272
TCRBV083_8	0.428	-0.485	-0.866	-0.517	-0.317
TCRBV083_9	-0.913	-0.250	0.379	0.158	-1.019
TCRBV083_10	-1.367	-0.538	-0.083	0.389	0.819
TCRBV083_11	0.537	1.008	-0.303	0.126	0.443
TCRBV083_12	0.197	0.136	-0.619	0.598	0.164
TCRBV09_5	-0.047	0.092	-0.073	-0.194	-0.105
TCRBV09_6	0.079	0.096	0.119	0.218	0.618
TCRBV09_7	-0.426	-0.792	-0.658	0.464	1.475
TCRBV09_8	-1.150	0.751	-0.059	2.114	2.512
TCRBV09_9	-1.427	-1.220	0.603	0.310	1.771
TCRBV09_10	-3.653	0.761	-1.931	-0.265	-0.570
TCRBV09_11	2.346	4.886	-2.610	-0.817	-1.496
TCRBV09_12	-0.794	-0.147	0.193	1.915	-2.329
TCRBV09_13	-0.370	-0.153	0.008	0.403	-0.513
TCRBV09_14	-0.142	-0.044	-0.045	0.034	-0.044
TCRBV09_15	-0.033	-0.053	-0.031	0.006	0.036
TCRBV10_6	-0.011	-0.025	0.240	-0.378	-0.486

FIG. 99D

TCRBV10_7	-0.846	-0.571	-0.083	-0.103	-0.801
TCRBV10_8	-1.940	-1.965	0.318	0.191	-1.208
TCRBV10_9	-3.228	-2.858	-3.466	-3.201	-0.140
TCRBV10_10	0.905	1.209	1.031	1.595	0.029
TCRBV10_11	3.868	3.072	1.212	0.989	1.470
TCRBV10_12	1.212	1.125	0.722	0.912	1.126
TCRBV10_13	0.039	0.013	0.026	-0.005	0.008
TCRBV11_5	-0.050	-0.045	-0.156	0.081	-0.219
TCRBV11_6	-0.178	-0.975	-0.254	0.425	0.322
TCRBV11_7	-0.707	-0.515	-0.275	0.313	0.285
TCRBV11_8	0.365	-1.932	-0.336	1.796	0.859
TCRBV11_9	1.232	1.065	-2.009	-1.357	-1.209
TCRBV11_10	0.552	0.504	1.077	0.352	0.806
TCRBV11_11	1.134	0.543	1.004	-0.589	0.380
TCRBV11_12	1.027	1.424	0.213	-0.171	0.292
TCRBV11_13	0.143	0.584	0.324	-0.137	0.260
TCRBV11_14	0.175	0.060	0.115	-0.023	0.038
TCRBV11_15	0.065	0.022	0.043	-0.009	0.014
TCRBV12_4	-0.150	0.055	-0.102	0.270	-0.033
TCRBV12_5	-1.571	0.588	3.528	-0.107	1.233
TCRBV12_6	-0.568	1.431	0.523	0.279	0.579
TCRBV12_7	-0.956	1.053	0.361	2.507	-0.079
TCRBV12_8	-0.159	0.382	-0.103	1.866	0.641
TCRBV12_9	-0.056	-3.527	-0.407	-0.837	0.557
TCRBV12_10	2.350	1.956	-2.592	-4.345	-3.795
TCRBV12_11	0.881	-1.674	-0.794	0.260	0.800
TCRBV12_12	0.230	-0.264	-0.413	0.107	0.098
TCRBV13_5	0.076	0.008	0.067	0.044	0.033
TCRBV13_6	2.347	1.421	-1.265	-0.081	-0.483
TCRBV13_7	0.890	-1.644	-0.824	0.685	-1.078
TCRBV13_8	-2.806	-0.933	0.717	0.080	0.151
TCRBV13_9	-1.570	0.847	2.456	1.181	0.257
TCRBV13_10	0.410	-0.242	-1.887	-1.004	0.312
TCRBV13_11	0.428	0.590	0.728	-0.956	0.598
TCRBV13_12	0.300	0.096	0.012	0.015	0.275
TCRBV13_13	-0.074	-0.145	-0.005	0.036	-0.065
TCRBV14_5	0.143	0.091	0.098	-0.168	0.061
TCRBV14_6	-0.006	-0.451	0.205	-0.471	-0.095
TCRBV14_7	0.196	-0.358	-1.411	-0.055	1.201
TCRBV14_8	0.723	0.278	-1.039	-0.522	-0.216
TCRBV14_9	-0.986	-0.709	0.892	1.919	-0.163
TCRBV14_10	-0.069	0.383	0.959	-0.075	0.459
TCRBV14_11	0.144	0.249	0.290	-0.350	-1.433
TCRBV14_12	-0.131	0.468	0.006	-0.219	0.121
TCRBV14_13	-0.014	0.049	0.000	-0.058	0.065
TCRBV15_4	0.085	0.146	0.111	0.076	0.114
TCRBV15_5	-0.014	0.965	-0.858	0.796	-2.141
TCRBV15_6	-0.782	0.032	0.709	0.119	0.178
TCRBV15_7	-0.568	-0.412	1.741	0.356	-0.017
TCRBV15_8	0.590	-0.164	0.529	1.953	0.471
TCRBV15_9	2.449	0.557	-1.023	-1.399	0.259
TCRBV15_10	1.173	0.101	-0.702	-0.744	1.992
TCRBV15_11	0.787	-0.388	-0.279	-0.434	0.660
TCRBV15_12	0.037	-0.102	-0.482	-0.042	0.311
TCRBV16_5	-0.149	-0.080	0.366	-0.042	-0.038
TCRBV16_6	-1.187	-0.135	0.822	-0.106	-0.203
TCRBV16_7	-0.990	-2.100	-0.183	-2.733	-1.300
TCRBV16_8	0.923	-2.155	-0.251	0.053	0.684
TCRBV16_9	6.027	-2.138	-0.724	0.202	0.053
TCRBV16_10	1.533	4.222	0.883	1.462	1.876
TCRBV16_11	0.283	3.477	1.545	0.794	-3.877
TCRBV16_12	0.862	-2.339	-0.839	3.805	1.543
TCRBV16_13	-0.014	0.144	-0.078	0.191	-0.021

FIG. 100A

TCRBV18_3	0.010	-0.005	0.011	0.004	0.026
TCRBV18_4	0.376	-0.071	0.845	0.676	-0.408
TCRBV18_5	0.044	-0.234	1.934	0.669	-0.082
TCRBV18_6	1.002	-2.737	2.759	0.137	-0.167
TCRBV18_7	-0.923	-2.518	4.985	-2.402	-0.768
TCRBV18_8	0.355	-3.888	-0.600	-3.218	0.983
TCRBV18_9	-1.719	0.752	-1.847	-1.847	2.425
TCRBV18_10	-0.495	0.068	-1.102	0.650	0.739
TCRBV18_11	-0.631	0.660	-0.391	0.157	0.008
TCRBV18_12	0.019	0.095	-0.038	0.137	0.035
TCRBV18_13	0.015	0.021	0.036	-0.010	0.075
TCRBV20_5	0.091	0.012	-0.065	-0.190	-0.227
TCRBV20_6	-0.052	-0.617	-0.670	-0.484	-0.213
TCRBV20_7	0.660	-0.862	0.571	0.475	-0.101
TCRBV20_8	1.607	0.279	-0.753	0.098	-1.345
TCRBV20_9	-1.161	-1.488	-0.001	-0.149	1.441
TCRBV20_10	0.864	0.735	0.117	0.790	1.829
TCRBV20_11	1.879	0.292	0.966	-0.001	1.358
TCRBV20_12	0.598	0.964	0.263	-0.659	0.373
TCRBV20_13	-0.797	1.301	-0.772	0.738	-1.378
TCRBV20_14	0.069	0.118	0.090	0.062	0.092
	11	12	13	14	15
TCRBV01_6	-0.078	0.174	0.009	-0.004	0.123
TCRBV01_7	-0.512	0.096	0.280	0.259	-0.011
TCRBV01_8	-1.333	0.323	0.740	-0.141	-1.727
TCRBV01_9	0.102	-0.588	-2.611	-0.115	-1.011
TCRBV01_10	-0.980	0.909	3.932	-0.993	-0.110
TCRBV01_11	0.693	0.718	-0.735	1.775	1.186
TCRBV01_12	1.174	0.599	0.497	0.846	0.433
TCRBV01_13	0.033	0.051	0.068	0.129	0.190
TCRBV01_14	-0.021	0.027	0.006	-0.006	0.009
TCRBV02_6	0.154	-0.275	-0.102	0.043	-0.365
TCRBV02_7	0.127	-0.905	0.185	0.111	0.538
TCRBV02_8	-1.231	-0.227	-0.822	0.347	0.338
TCRBV02_9	-1.144	0.417	-0.684	0.218	-0.451
TCRBV02_10	-0.414	-0.026	-0.231	0.930	0.281
TCRBV02_11	0.541	-1.179	0.125	0.634	0.701
TCRBV02_12	0.220	-0.146	-0.256	0.435	0.421
TCRBV02_13	-0.051	0.004	0.124	-0.055	-0.160
TCRBV03_4	0.047	0.061	0.043	-0.069	-0.034
TCRBV03_5	0.094	0.128	0.070	-0.063	-0.009
TCRBV03_6	-0.130	0.799	0.618	0.029	-0.061
TCRBV03_7	0.615	0.934	0.470	-0.218	0.970
TCRBV03_8	-0.486	2.181	0.323	-1.628	1.389
TCRBV03_9	-0.872	2.185	0.844	0.028	-0.153
TCRBV03_10	0.055	-1.247	-0.165	-1.776	-0.932
TCRBV03_11	1.977	-1.766	-0.699	2.395	-1.069
TCRBV03_12	0.074	-0.246	-0.413	1.289	-0.247
TCRBV03_13	-2.295	-0.721	1.094	1.764	-0.772
TCRBV04_6	0.020	0.001	0.001	0.002	0.012
TCRBV04_7	0.136	-0.017	-0.107	0.240	0.248
TCRBV04_8	-0.292	-0.174	-0.504	0.658	0.212
TCRBV04_9	-1.217	-0.900	-1.231	0.313	1.284
TCRBV04_10	-0.374	-0.005	0.463	1.101	-0.221
TCRBV04_11	1.439	0.706	0.508	1.235	-0.646
TCRBV04_12	0.914	0.618	0.450	0.448	-0.682
TCRBV04_13	-0.411	0.451	1.487	-3.362	1.290
TCRBV04_14	-0.468	-0.813	-0.881	-0.561	-1.477
TCRBV04_15	0.252	0.134	-0.187	-0.076	-0.019
TCRBV051_5	0.037	0.085	-0.165	0.011	-0.021
TCRBV051_6	0.984	0.372	-0.124	0.178	-0.348
TCRBV051_7	0.266	-1.065	-0.286	0.797	0.201

FIG. 100B

TCRBV051_8	1.067	-0.727	1.573	0.059	1.657
TCRBV051_9	0.749	-1.256	1.719	1.549	0.140
TCRBV051_10	1.252	-2.882	-0.338	0.221	-0.562
TCRBV051_11	1.331	0.911	-0.892	0.305	1.625
TCRBV051_12	-0.100	-1.198	-0.412	-0.321	-0.780
TCRBV051_13	-0.026	0.003	-0.199	-0.045	-0.040
TCRBV052_6	-0.018	0.036	-0.400	0.167	-0.219
TCRBV052_7	0.832	-0.605	-0.637	0.979	-0.694
TCRBV052_8	2.655	0.253	0.421	0.442	-1.192
TCRBV052_9	-1.275	-1.512	-2.308	2.217	1.751
TCRBV052_10	2.679	-1.899	1.344	0.242	-0.080
TCRBV052_11	0.694	-1.580	1.672	-0.806	1.779
TCRBV052_12	0.052	-0.423	0.878	-0.484	0.659
TCRBV052_13	-0.059	-0.027	-0.092	-0.004	-0.132
TCRBV06_5	0.015	-0.002	-0.078	0.045	0.027
TCRBV06_6	0.873	0.757	-0.508	0.284	0.106
TCRBV06_7	0.419	0.450	-0.304	-0.381	0.385
TCRBV06_8	0.174	-0.321	-0.052	0.291	0.033
TCRBV06_9	-0.676	2.490	-0.582	0.293	-1.469
TCRBV06_10	-0.778	0.460	0.997	0.924	-0.431
TCRBV06_11	-0.564	-1.128	1.080	-0.398	0.380
TCRBV06_12	-0.224	-0.449	1.517	0.698	0.343
TCRBV06_13	-0.160	0.051	0.115	-0.005	-0.292
TCRBV07_5	0.000	-0.002	0.007	0.013	-0.004
TCRBV07_6	-0.073	0.647	-0.249	1.430	-0.438
TCRBV07_7	0.061	2.148	-1.865	2.078	-2.463
TCRBV07_8	0.610	0.469	0.846	0.991	0.191
TCRBV07_9	3.442	-1.141	2.762	1.322	1.160
TCRBV07_10	-2.361	-1.803	0.384	-2.036	0.444
TCRBV07_11	-1.323	1.075	-0.452	-1.209	-0.014
TCRBV07_12	-1.169	0.638	0.747	-0.781	0.214
TCRBV07_13	-0.109	0.278	0.005	-0.058	-0.009
TCRBV081_5	0.197	0.148	-0.058	0.048	-0.062
TCRBV081_6	0.170	-0.052	-0.968	0.605	-0.198
TCRBV081_7	-0.839	-0.620	-1.479	0.460	-0.679
TCRBV081_8	0.396	0.900	-0.862	0.605	-0.973
TCRBV081_9	2.751	-2.471	2.729	-1.778	-2.626
TCRBV081_10	-1.599	1.636	0.241	0.148	1.929
TCRBV081_11	-0.824	0.565	-0.030	0.057	1.747
TCRBV081_12	-0.252	-0.106	0.427	-0.145	0.861
TCRBV082_4	0.306	0.138	-0.257	-0.115	0.042
TCRBV082_5	0.898	0.162	-0.632	0.113	0.380
TCRBV082_6	0.468	0.356	-0.328	0.318	0.175
TCRBV082_7	1.392	0.760	-1.129	-0.025	0.290
TCRBV082_8	-0.942	0.537	0.677	0.358	-0.111
TCRBV082_9	-1.243	-1.178	0.933	-0.276	-0.903
TCRBV082_10	-0.635	-0.447	0.845	-0.179	0.033
TCRBV082_11	-0.244	-0.328	-0.109	-0.193	0.095
TCRBV083_4	-0.164	-0.052	0.069	0.119	-0.066
TCRBV083_5	-0.099	-0.045	0.280	-0.196	0.004
TCRBV083_6	0.242	-0.026	-0.030	0.469	-0.242
TCRBV083_7	-0.947	-2.132	-0.733	-0.681	-0.412
TCRBV083_8	-0.394	-0.908	-0.263	-0.506	0.589
TCRBV083_9	0.540	1.475	0.937	1.007	0.280
TCRBV083_10	0.306	0.961	0.788	0.869	-0.446
TCRBV083_11	0.672	1.016	-1.164	-0.405	0.471
TCRBV083_12	-0.156	-0.289	0.116	-0.677	-0.178
TCRBV09_5	0.266	0.179	-0.059	0.078	-0.128
TCRBV09_6	-0.111	0.146	0.128	0.116	-0.105
TCRBV09_7	-0.594	-0.490	0.412	0.140	-0.174
TCRBV09_8	2.326	1.296	-4.307	-0.116	-0.213
TCRBV09_9	-4.105	-2.611	1.735	2.524	-0.563
TCRBV09_10	1.694	-0.367	2.112	2.090	-0.820
TCRBV09_11	-1.337	-0.362	-0.255	1.706	1.682

FIG. 100C

TCRBV09_12	0.541	-0.364	0.534	-1.227	-0.188
TCRBV09_13	0.211	0.151	-0.133	-0.311	0.074
TCRBV09_14	0.125	0.130	-0.114	-0.045	0.051
TCRBV09_15	0.009	0.002	-0.025	-0.027	0.013
TCRBV10_6	-0.012	0.368	-0.653	0.868	0.090
TCRBV10_7	-0.912	0.002	-0.393	0.171	-0.084
TCRBV10_8	0.355	0.095	-0.061	0.674	-0.364
TCRBV10_9	-1.991	-2.010	-0.427	0.144	1.149
TCRBV10_10	1.567	0.473	0.279	-1.791	0.670
TCRBV10_11	0.695	1.273	0.407	-0.031	-1.730
TCRBV10_12	0.275	-0.231	0.827	-0.000	0.285
TCRBV10_13	0.023	0.029	0.021	-0.033	-0.016
TCRBV11_5	-0.193	-0.014	0.031	0.315	0.141
TCRBV11_6	0.376	-0.396	0.466	0.083	0.262
TCRBV11_7	-1.021	-0.708	-0.515	0.206	-0.530
TCRBV11_8	-0.618	-0.189	-0.437	0.867	-0.265
TCRBV11_9	-0.559	0.011	0.206	-2.024	1.101
TCRBV11_10	0.684	1.088	0.268	0.829	-0.592
TCRBV11_11	-0.032	0.970	1.096	0.727	0.166
TCRBV11_12	0.295	0.819	0.576	1.136	-0.948
TCRBV11_13	0.007	0.547	0.366	-0.183	-0.153
TCRBV11_14	0.102	0.132	0.094	-0.150	-0.074
TCRBV11_15	0.038	0.049	0.035	-0.056	-0.027
TCRBV12_4	-0.091	0.082	-0.005	-0.348	0.187
TCRBV12_5	-1.887	-0.275	-0.056	0.520	0.450
TCRBV12_6	-1.370	-1.728	-0.007	-1.965	1.374
TCRBV12_7	-0.900	-1.145	0.008	0.832	0.147
TCRBV12_8	-0.161	-0.736	0.491	0.882	-0.985
TCRBV12_9	1.034	1.046	-0.573	0.630	0.530
TCRBV12_10	2.665	2.278	0.950	-0.544	-1.339
TCRBV12_11	0.437	0.418	-0.469	-0.049	-0.546
TCRBV12_12	0.273	0.061	-0.338	0.042	0.183
TCRBV13_5	0.028	0.098	0.045	-0.072	-0.086
TCRBV13_6	-0.577	0.100	-0.288	-0.483	-2.301
TCRBV13_7	-0.692	1.404	0.701	0.790	-0.563
TCRBV13_8	-1.035	1.378	1.371	1.368	-0.324
TCRBV13_9	-1.463	0.973	-0.447	-2.218	0.425
TCRBV13_10	2.114	-2.950	-0.854	-0.823	1.730
TCRBV13_11	1.287	-0.497	-1.093	1.108	1.210
TCRBV13_12	0.316	-0.348	0.284	0.370	0.021
TCRBV13_13	0.021	-0.157	0.282	-0.039	-0.113
TCRBV14_5	-0.049	-0.091	-0.288	0.112	0.008
TCRBV14_6	0.008	-0.564	0.211	-0.628	0.052
TCRBV14_7	-0.276	-0.354	-0.163	1.050	0.214
TCRBV14_8	-0.362	0.764	1.069	1.242	-1.025
TCRBV14_9	0.786	-0.529	-1.315	-0.640	0.109
TCRBV14_10	-0.477	-0.907	0.267	-0.782	0.454
TCRBV14_11	0.316	1.092	0.004	0.011	0.132
TCRBV14_12	0.124	0.451	0.204	-0.275	0.110
TCRBV14_13	-0.070	0.138	0.010	-0.090	-0.053
TCRBV15_4	0.012	-0.078	0.138	0.067	0.001
TCRBV15_5	-1.850	0.707	0.205	2.402	1.265
TCRBV15_6	0.065	1.000	0.117	-0.358	-0.624
TCRBV15_7	1.385	-0.331	-0.309	0.726	-0.696
TCRBV15_8	1.706	-0.015	-1.181	-0.679	-0.295
TCRBV15_9	-1.423	-2.321	0.532	-2.150	-2.565
TCRBV15_10	-0.206	2.095	1.694	1.098	1.240
TCRBV15_11	-0.457	1.007	0.755	0.430	0.465
TCRBV15_12	-0.154	0.244	0.236	0.214	0.289
TCRBV16_5	-0.091	0.009	0.033	0.184	-0.132
TCRBV16_6	-0.820	0.114	-0.049	1.644	0.804
TCRBV16_7	1.402	0.547	2.353	-1.251	0.165
TCRBV16_8	-0.242	-1.401	0.563	0.608	-1.375

FIG. 100D

TCRBV16_9	-0.508	-1.945	-2.137	0.262	-1.293
TCRBV16_10	1.217	-1.664	2.018	1.802	1.830
TCRBV16_11	3.340	-0.994	-1.906	1.049	1.875
TCRBV16_12	0.410	1.889	2.087	0.325	-0.894
TCRBV16_13	-0.071	-0.004	0.100	-0.119	-0.026
TCRBV18_3	0.008	-0.001	0.009	-0.021	0.004
TCRBV18_4	0.464	-0.011	0.314	0.352	0.224
TCRBV18_5	0.602	-0.431	0.536	0.388	0.572
TCRBV18_6	1.182	-0.288	1.124	1.667	2.070
TCRBV18_7	-0.701	1.554	0.514	-0.669	-0.124
TCRBV18_8	0.382	-0.273	-0.817	-1.371	3.707
TCRBV18_9	0.826	0.369	-1.522	-0.119	0.722
TCRBV18_10	0.431	-0.395	-0.410	-0.265	1.129
TCRBV18_11	-1.118	1.089	-0.078	-0.216	0.141
TCRBV18_12	-0.017	0.102	0.061	-0.269	0.059
TCRBV18_13	0.017	0.022	-0.014	-0.002	0.015
TCRBV20_5	-0.139	-0.344	-0.040	-0.216	0.167
TCRBV20_6	-0.136	0.001	0.388	0.103	0.193
TCRBV20_7	0.527	0.900	-0.383	-0.072	-0.663
TCRBV20_8	-0.893	2.152	-0.642	-0.108	-0.774
TCRBV20_9	0.793	2.037	-0.021	-2.053	0.144
TCRBV20_10	1.088	0.647	1.517	0.033	1.514
TCRBV20_11	0.094	-2.801	0.007	0.559	-2.299
TCRBV20_12	0.625	-0.993	1.211	0.927	-0.801
TCRBV20_13	-2.891	0.774	0.037	2.526	1.599
TCRBV20_14	0.010	-0.063	0.112	0.054	0.001

	16	17	18	19	20
TCRBV01_6	0.124	-0.157	0.071	0.040	-0.061
TCRBV01_7	-0.062	-0.845	0.717	0.465	-0.518
TCRBV01_8	-1.057	-0.575	0.555	0.526	0.206
TCRBV01_9	0.722	-1.905	1.473	1.528	1.108
TCRBV01_10	1.325	2.409	-0.095	-0.398	-0.287
TCRBV01_11	-0.453	0.570	0.135	-0.873	-0.276
TCRBV01_12	-0.420	-0.005	-1.074	-1.012	0.120
TCRBV01_13	0.157	0.356	-0.377	-0.476	0.195
TCRBV01_14	0.023	0.007	-0.040	-0.029	0.054
TCRBV02_6	0.124	-0.487	0.092	0.060	-0.427
TCRBV02_7	0.137	-0.177	-0.015	-0.403	0.425
TCRBV02_8	0.898	-0.608	0.935	-0.899	0.276
TCRBV02_9	0.891	-0.608	0.180	-2.825	-0.066
TCRBV02_10	0.563	-0.344	1.209	-2.132	1.038
TCRBV02_11	0.535	-0.072	0.086	-0.848	0.656
TCRBV02_12	0.057	-0.164	-0.255	0.113	0.913
TCRBV02_13	-0.119	0.038	-0.124	-0.115	0.028
TCRBV03_4	-0.080	0.063	-0.055	0.183	-0.074
TCRBV03_5	0.017	0.072	-0.042	0.251	-0.093
TCRBV03_6	-0.049	-0.981	0.734	0.182	0.651
TCRBV03_7	-0.240	-1.014	0.022	0.530	0.368
TCRBV03_8	-1.294	-0.648	-0.327	-0.074	-0.214
TCRBV03_9	0.695	0.387	1.157	-0.263	-0.296
TCRBV03_10	1.129	0.715	-1.522	-2.032	-0.622
TCRBV03_11	-0.592	0.692	0.946	0.613	0.755
TCRBV03_12	-0.058	0.619	0.307	-1.371	-0.138
TCRBV03_13	0.829	-0.050	0.147	1.753	0.204
TCRBV04_6	-0.032	-0.039	0.043	0.035	-0.003
TCRBV04_7	0.086	-0.052	-0.209	-0.021	0.669
TCRBV04_8	0.498	0.595	-0.175	0.273	0.735
TCRBV04_9	1.633	0.667	-0.553	0.853	0.758
TCRBV04_10	1.406	1.839	-1.796	0.574	0.575
TCRBV04_11	-0.894	-2.797	0.324	-0.295	-1.388
TCRBV04_12	0.243	-1.215	0.951	-0.001	-1.222
TCRBV04_13	-1.891	0.962	0.844	-1.124	-1.209

FIG. 101A

TCRBV04_14	-1.180	0.062	0.229	-0.274	1.002
TCRBV04_15	0.133	-0.022	0.342	-0.019	0.082
TCRBV051_5	0.049	0.126	0.001	0.049	-0.038
TCRBV051_6	-0.172	0.329	-0.255	0.342	-0.356
TCRBV051_7	0.564	0.652	-0.237	0.532	-2.308
TCRBV051_8	-0.607	-1.852	-1.027	0.178	0.088
TCRBV051_9	0.505	2.708	-1.401	0.296	0.629
TCRBV051_10	1.410	0.309	-0.606	1.567	0.580
TCRBV051_11	0.191	-1.680	-1.705	-0.481	0.606
TCRBV051_12	-0.260	-0.387	0.506	0.405	1.067
TCRBV051_13	0.072	0.055	0.127	0.034	0.072
TCRBV052_6	-0.021	-0.066	0.048	0.285	-0.426
TCRBV052_7	0.516	0.563	0.432	0.349	-1.158
TCRBV052_8	1.275	0.287	-3.475	1.409	1.577
TCRBV052_9	0.447	2.745	-0.828	-0.674	-1.669
TCRBV052_10	0.331	0.319	0.222	0.947	0.459
TCRBV052_11	-0.075	-2.727	-0.831	0.463	0.986
TCRBV052_12	-0.760	-0.671	-0.183	0.057	0.650
TCRBV052_13	0.040	-0.190	0.018	0.086	-0.077
TCRBV06_5	0.001	0.014	-0.014	0.032	0.008
TCRBV06_6	0.318	-0.382	-0.296	0.091	0.336
TCRBV06_7	-0.106	-0.250	0.097	0.079	-0.238
TCRBV06_8	1.015	-0.993	0.506	2.042	0.232
TCRBV06_9	0.155	0.610	-1.311	-0.041	0.240
TCRBV06_10	0.775	0.108	-0.016	-0.287	-0.528
TCRBV06_11	-1.610	0.622	2.046	-0.848	-0.011
TCRBV06_12	-0.285	0.525	0.107	-0.984	0.711
TCRBV06_13	0.095	-0.399	0.248	-0.314	-0.209
TCRBV07_5	0.001	-0.006	0.033	0.003	-0.030
TCRBV07_6	-0.199	0.250	-0.337	0.099	-0.432
TCRBV07_7	-0.655	-0.015	-1.094	-0.517	-1.191
TCRBV07_8	-0.707	0.607	0.002	-0.295	-0.780
TCRBV07_9	-2.083	0.792	1.591	0.743	0.641
TCRBV07_10	2.228	-0.425	0.112	0.196	-0.042
TCRBV07_11	0.535	-1.187	0.726	-0.364	1.592
TCRBV07_12	1.107	-0.151	0.153	-0.067	0.806
TCRBV07_13	0.129	-0.010	0.181	-0.028	-0.023
TCRBV081_5	0.013	0.091	-0.109	0.007	0.044
TCRBV081_6	-0.541	0.327	0.288	0.012	-0.439
TCRBV081_7	-0.518	0.827	-0.029	0.556	-0.679
TCRBV081_8	-1.803	0.175	-0.575	0.082	-0.739
TCRBV081_9	0.123	0.510	0.698	-1.334	0.899
TCRBV081_10	2.174	-2.065	-0.454	-0.221	0.812
TCRBV081_11	0.352	-0.104	0.127	0.647	-0.016
TCRBV081_12	0.200	0.240	0.053	0.251	0.119
TCRBV082_4	0.049	0.139	0.365	0.270	0.226
TCRBV082_5	0.463	0.344	0.562	0.192	0.019
TCRBV082_6	0.073	0.598	0.327	-0.317	0.399
TCRBV082_7	0.692	0.806	0.925	-1.173	0.811
TCRBV082_8	0.196	-0.960	-0.411	0.222	0.033
TCRBV082_9	-0.748	-0.707	-0.838	0.240	-0.546
TCRBV082_10	-0.574	-0.492	-0.743	0.435	-0.707
TCRBV082_11	-0.152	0.272	-0.188	0.132	-0.235
TCRBV083_4	0.049	-0.010	0.000	0.113	0.011
TCRBV083_5	0.183	-0.010	-0.152	-0.114	0.093
TCRBV083_6	-0.087	-0.244	0.511	-0.237	-0.027
TCRBV083_7	1.562	-0.251	0.484	0.466	0.080
TCRBV083_8	1.240	0.498	0.490	0.384	-1.463
TCRBV083_9	-1.147	-0.422	-0.174	0.433	1.133
TCRBV083_10	-0.259	0.133	0.203	0.659	0.279
TCRBV083_11	-1.268	0.143	-0.426	-1.292	-0.063
TCRBV083_12	-0.273	0.162	-0.935	-0.413	-0.044
TCRBV09_5	-0.018	-0.023	-0.181	-0.007	-0.004
TCRBV09_6	-0.059	-0.000	0.298	-0.222	-0.285

FIG.101B

TCRBV09_7	-0.299	0.014	0.683	-0.647	-0.585
TCRBV09_8	0.845	0.325	1.078	-1.432	1.841
TCRBV09_9	0.057	-1.447	1.129	-0.144	-1.919
TCRBV09_10	0.091	-2.132	-0.403	-2.030	-0.489
TCRBV09_11	0.168	0.086	2.772	0.247	0.091
TCRBV09_12	0.049	-0.331	1.005	-0.468	0.093
TCRBV09_13	0.331	0.113	0.254	-0.124	0.043
TCRBV09_14	0.311	0.178	0.149	0.026	0.069
TCRBV09_15	0.042	0.067	0.015	-0.008	0.029
TCRBV10_6	-0.048	0.040	0.139	-0.675	-0.522
TCRBV10_7	0.311	-0.534	-1.023	-1.924	-0.602
TCRBV10_8	1.288	-0.821	-0.583	-1.239	0.429
TCRBV10_9	0.178	-0.709	0.306	1.088	0.276
TCRBV10_10	-0.732	0.220	0.837	0.390	1.168
TCRBV10_11	-0.260	1.184	0.179	1.810	-0.676
TCRBV10_12	-0.699	0.588	0.171	0.461	-0.036
TCRBV10_13	-0.039	0.030	-0.026	0.088	-0.036
TCRBV11_5	-0.187	0.121	-0.022	-0.054	0.064
TCRBV11_6	-0.403	-0.962	0.567	0.149	0.162
TCRBV11_7	-0.099	-0.881	0.560	-0.106	0.368
TCRBV11_8	-0.061	-0.851	0.280	-0.539	-0.037
TCRBV11_9	1.009	0.080	-0.135	0.004	-0.111
TCRBV11_10	0.417	0.408	-0.147	-0.359	0.545
TCRBV11_11	0.105	0.837	0.107	-0.425	0.336
TCRBV11_12	0.065	0.524	0.250	0.166	-0.212
TCRBV11_13	-0.249	0.392	0.070	0.387	-0.355
TCRBV11_14	-0.174	0.137	-0.119	0.398	-0.161
TCRBV11_15	-0.065	0.051	-0.044	0.148	-0.060
TCRBV12_4	-0.244	0.064	-0.262	-0.166	-0.207
TCRBV12_5	-1.143	0.239	-0.599	-0.243	-0.526
TCRBV12_6	0.699	0.772	-0.679	0.103	-0.365
TCRBV12_7	-1.397	0.324	-1.048	0.097	1.693
TCRBV12_8	1.237	-0.944	-0.089	-0.817	0.050
TCRBV12_9	-0.144	0.008	1.166	-0.049	-1.230
TCRBV12_10	0.229	-0.337	0.371	-0.210	0.230
TCRBV12_11	0.655	0.039	0.818	0.658	0.117
TCRBV12_12	0.109	-0.166	0.321	0.629	0.238
TCRBV13_5	-0.120	0.101	-0.151	0.302	-0.156
TCRBV13_6	0.219	-0.180	0.339	1.069	-0.024
TCRBV13_7	0.336	-0.753	0.308	-0.422	1.965
TCRBV13_8	-0.253	-0.434	0.583	0.931	0.916
TCRBV13_9	-0.136	0.253	-0.955	0.323	0.098
TCRBV13_10	0.615	0.796	0.191	0.492	-1.495
TCRBV13_11	-0.627	0.030	-0.067	-1.998	-1.172
TCRBV13_12	0.155	0.326	-0.308	-0.711	-0.234
TCRBV13_13	-0.189	-0.140	0.061	0.013	0.101
TCRBV14_5	-0.199	-0.049	0.061	-0.224	-0.008
TCRBV14_6	0.772	-0.000	-0.173	-0.210	-0.758
TCRBV14_7	-0.673	-0.330	1.015	0.553	0.062
TCRBV14_8	0.312	-0.529	-0.133	-0.306	-0.777
TCRBV14_9	2.124	0.026	-0.375	-0.035	1.647
TCRBV14_10	-1.006	0.793	-0.506	-0.449	-0.709
TCRBV14_11	-0.945	0.163	0.354	0.464	0.697
TCRBV14_12	-0.307	-0.108	-0.291	0.149	-0.104
TCRBV14_13	-0.079	0.033	0.048	0.059	-0.050
TCRBV15_4	-0.069	0.047	-0.002	-0.041	0.038
TCRBV15_5	-1.626	0.821	-0.612	0.508	1.755
TCRBV15_6	-0.294	-0.803	0.108	0.105	-0.695
TCRBV15_7	-0.310	-1.202	0.567	0.897	-1.000
TCRBV15_8	0.473	-0.798	-0.195	-0.387	-2.128
TCRBV15_9	-1.754	0.153	0.793	-1.055	2.012
TCRBV15_10	2.513	0.699	0.264	-0.576	0.071
TCRBV15_11	1.052	0.811	0.078	-0.046	0.332

FIG.101C

TCRBV15_12	0.373	0.129	0.365	0.366	0.157
TCRBV16_5	0.146	-0.002	0.260	0.062	-0.063
TCRBV16_6	-0.200	-0.088	-0.380	0.761	0.949
TCRBV16_7	-0.042	0.935	0.401	0.641	-0.147
TCRBV16_8	0.165	1.818	-0.501	-0.790	0.478
TCRBV16_9	-2.297	-1.579	-0.346	0.342	0.375
TCRBV16_10	1.631	-1.711	-0.706	0.161	-0.469
TCRBV16_11	1.966	0.598	0.138	-0.291	0.474
TCRBV16_12	0.732	0.347	-2.025	1.928	-0.653
TCRBV16_13	0.010	-0.203	-0.071	-0.121	-0.060
TCRBV18_3	0.003	0.009	0.025	0.002	0.021
TCRBV18_4	-0.382	0.172	1.117	-0.505	-0.140
TCRBV18_5	-0.088	0.569	2.138	-0.633	-0.143
TCRBV18_6	0.177	0.767	3.683	0.621	0.572
TCRBV18_7	0.141	2.436	0.365	-1.603	1.022
TCRBV18_8	-2.443	-0.368	-1.166	0.594	0.801
TCRBV18_9	-2.942	0.730	-0.489	1.739	-0.345
TCRBV18_10	-1.010	1.406	-1.356	1.166	-0.982
TCRBV18_11	-0.379	1.000	-0.400	0.442	-0.154
TCRBV18_12	-0.210	0.135	-0.170	0.079	-0.144
TCRBV18_13	0.017	0.073	0.006	0.008	0.032
TCRBV20_5	0.174	0.057	0.143	0.002	-0.209
TCRBV20_6	0.316	-0.883	0.112	0.476	-0.215
TCRBV20_7	1.152	-0.721	-0.117	1.019	-0.307
TCRBV20_8	0.936	0.095	1.419	2.026	-0.289
TCRBV20_9	0.848	1.014	2.647	0.289	-0.908
TCRBV20_10	-0.694	-2.291	-1.970	-1.817	-0.435
TCRBV20_11	-0.868	0.564	-0.547	-0.839	1.198
TCRBV20_12	0.171	0.778	-0.076	-0.695	0.193
TCRBV20_13	-1.621	1.203	-0.243	-0.657	1.482
TCRBV20_14	-0.056	0.038	-0.001	-0.033	0.031

	21	22	23	24	25
TCRBV01_6	0.176	0.112	0.092	0.019	0.220
TCRBV01_7	-0.025	0.204	0.115	0.784	-0.249
TCRBV01_8	-0.548	0.610	-0.567	0.525	0.793
TCRBV01_9	0.806	-0.919	-1.334	0.404	0.220
TCRBV01_10	1.758	1.350	-0.293	-1.577	-1.049
TCRBV01_11	0.213	-0.948	0.690	0.516	0.032
TCRBV01_12	-0.628	-0.167	1.157	0.782	0.126
TCRBV01_13	-0.014	-0.154	0.417	-0.050	0.203
TCRBV01_14	0.007	-0.030	0.022	-0.007	-0.025
TCRBV02_6	-0.154	-0.144	-0.062	-0.182	-0.046
TCRBV02_7	-0.300	-0.612	0.634	-0.200	0.247
TCRBV02_8	-0.753	-0.138	0.397	-0.490	0.138
TCRBV02_9	-0.882	-1.559	1.175	-0.541	-0.216
TCRBV02_10	-0.241	-0.310	0.858	-1.293	-0.075
TCRBV02_11	-0.595	0.219	0.346	-0.399	-0.503
TCRBV02_12	-0.223	0.216	0.268	-0.271	-0.172
TCRBV02_13	-0.083	0.054	-0.072	-0.051	0.146
TCRBV03_4	0.084	0.059	-0.092	0.089	0.012
TCRBV03_5	0.260	0.057	-0.045	0.149	0.083
TCRBV03_6	0.805	0.524	0.640	0.081	0.446
TCRBV03_7	0.367	0.132	1.060	-0.101	-0.038
TCRBV03_8	0.560	0.177	0.901	-0.332	0.677
TCRBV03_9	1.092	-0.183	-0.343	0.379	-0.169
TCRBV03_10	-2.127	-0.655	-1.703	0.653	0.548
TCRBV03_11	0.172	0.102	-0.182	0.237	-1.295
TCRBV03_12	0.681	0.039	-0.892	-0.369	-0.379
TCRBV03_13	-0.149	-0.193	0.955	0.609	0.385
TCRBV04_6	-0.011	0.031	0.032	-0.044	-0.079
TCRBV04_7	0.125	0.106	0.112	0.430	-0.034
TCRBV04_8	0.159	0.143	0.492	0.417	0.131

FIG.101D

TCRBV04_9	-0.380	-0.497	0.305	0.967	0.401
TCRBV04_10	0.067	0.229	-0.235	-1.262	0.703
TCRBV04_11	0.696	0.081	-0.381	-1.045	-0.781
TCRBV04_12	0.930	-0.023	0.262	0.160	-0.422
TCRBV04_13	-1.525	-0.411	-0.484	0.267	-0.492
TCRBV04_14	0.085	0.119	-0.064	-0.042	0.604
TCRBV04_15	-0.145	0.222	-0.039	0.153	-0.031
TCRBV051_5	-0.187	0.084	0.140	-0.156	-0.047
TCRBV051_6	-0.784	0.005	1.127	-0.349	-1.081
TCRBV051_7	-0.145	0.663	0.917	-0.724	-1.560
TCRBV051_8	1.494	0.566	-0.074	1.290	0.101
TCRBV051_9	-2.002	-1.365	0.071	-0.026	-0.021
TCRBV051_10	0.689	0.479	-0.173	-1.119	0.751
TCRBV051_11	0.589	0.298	-2.312	-0.076	0.224
TCRBV051_12	0.311	0.128	-0.474	0.243	0.596
TCRBV051_13	-0.058	0.172	-0.043	0.226	0.025
TCRBV052_6	-0.193	0.005	0.047	-0.306	-0.083
TCRBV052_7	0.474	0.620	0.038	0.063	0.734
TCRBV052_8	-0.841	1.022	0.192	1.215	-1.125
TCRBV052_9	0.841	0.225	-0.634	0.213	0.509
TCRBV052_10	0.915	-0.694	0.182	-0.944	-0.388
TCRBV052_11	-0.563	-0.004	-0.516	-0.179	-0.233
TCRBV052_12	-0.552	-0.167	-0.179	-0.596	-0.379
TCRBV052_13	-0.175	0.021	0.050	-0.157	-0.044
TCRBV06_5	0.006	0.012	-0.049	-0.038	0.124
TCRBV06_6	0.384	-0.089	0.336	0.547	-0.537
TCRBV06_7	0.510	0.824	0.632	0.069	-0.184
TCRBV06_8	0.278	0.455	0.106	0.178	0.432
TCRBV06_9	1.472	-0.367	-0.245	-0.017	-0.570
TCRBV06_10	-0.804	-0.066	0.105	0.279	0.045
TCRBV06_11	-0.178	-0.623	0.586	0.092	1.272
TCRBV06_12	0.080	-0.207	-0.967	0.384	-0.366
TCRBV06_13	-0.004	0.120	-0.206	-0.099	0.054
TCRBV07_5	0.005	-0.011	0.025	0.001	-0.061
TCRBV07_6	0.273	-0.356	0.593	-0.086	-0.048
TCRBV07_7	-0.452	-1.366	0.766	0.175	-0.434
TCRBV07_8	-0.701	0.737	-0.779	0.164	-0.084
TCRBV07_9	0.020	-0.299	0.263	-0.804	1.635
TCRBV07_10	0.525	0.727	-0.751	1.821	-0.753
TCRBV07_11	0.931	0.422	0.884	0.200	0.171
TCRBV07_12	0.869	0.257	-0.832	-0.173	-0.303
TCRBV07_13	0.275	-0.052	0.129	0.098	0.148
TCRBV081_5	-0.186	0.018	0.214	-0.042	-0.124
TCRBV081_6	-0.383	0.415	-0.237	-0.181	0.147
TCRBV081_7	-0.135	0.263	-0.377	0.501	-0.332
TCRBV081_8	-0.470	0.091	0.358	0.083	-0.587
TCRBV081_9	1.522	-2.568	-1.689	1.176	0.150
TCRBV081_10	0.102	1.256	0.980	-0.910	0.959
TCRBV081_11	-0.321	0.553	0.529	-0.535	-0.090
TCRBV081_12	-0.129	-0.027	0.222	-0.092	-0.122
TCRBV082_4	-0.605	0.479	0.143	-0.066	0.096
TCRBV082_5	-0.214	0.771	0.245	0.443	0.490
TCRBV082_6	-0.308	1.061	0.104	0.159	0.290
TCRBV082_7	0.105	1.090	0.137	0.544	0.534
TCRBV082_8	-0.909	-2.105	-0.899	-0.301	-0.941
TCRBV082_9	0.967	-0.858	-0.159	-0.188	-0.426
TCRBV082_10	0.650	-0.672	-0.046	-0.573	-0.063
TCRBV082_11	0.313	0.234	0.474	-0.016	0.019
TCRBV083_4	-0.010	-0.006	0.079	0.049	0.038
TCRBV083_5	-0.037	-0.000	-0.069	0.041	0.079
TCRBV083_6	-0.326	-0.030	-0.069	0.140	-0.048
TCRBV083_7	-0.331	0.408	-0.024	0.293	-0.242
TCRBV083_8	-0.608	0.310	-0.479	0.183	-0.342
TCRBV083_9	-0.990	-0.398	0.460	-0.094	0.578

FIG. 102A

TCRBV083_10	0.333	0.091	0.214	-0.766	0.370
TCRBV083_11	1.560	-0.275	-0.432	0.101	-0.658
TCRBV083_12	0.410	-0.100	0.321	0.054	0.226
TCRBV09_5	-0.154	-0.028	0.180	0.083	-0.236
TCRBV09_6	-0.220	0.273	0.448	-0.401	0.203
TCRBV09_7	0.191	0.844	0.598	-0.603	-0.383
TCRBV09_8	-1.128	-0.203	-0.908	-2.343	0.176
TCRBV09_9	-1.097	-0.258	0.663	-0.596	1.788
TCRBV09_10	-0.528	0.356	0.622	-0.181	-0.575
TCRBV09_11	0.462	-1.803	-1.502	-0.530	0.616
TCRBV09_12	0.124	0.435	1.089	1.636	0.320
TCRBV09_13	0.131	0.467	0.605	0.913	-0.066
TCRBV09_14	0.140	0.199	0.164	0.490	0.108
TCRBV09_15	0.030	-0.003	0.032	0.081	-0.037
TCRBV10_6	0.722	0.362	-0.485	-0.361	-0.139
TCRBV10_7	0.842	0.382	-0.713	0.063	0.823
TCRBV10_8	0.316	-0.457	-0.381	-0.072	1.074
TCRBV10_9	0.045	-0.956	1.048	0.279	-1.374
TCRBV10_10	-0.434	-0.530	0.421	-0.130	-0.567
TCRBV10_11	-1.029	0.651	0.111	0.352	0.481
TCRBV10_12	-0.502	0.520	0.044	-0.173	-0.303
TCRBV10_13	0.040	0.028	-0.044	0.043	0.006
TCRBV11_5	-0.064	0.062	-0.260	0.134	-0.098
TCRBV11_6	-0.972	0.017	-0.360	0.328	0.057
TCRBV11_7	-0.587	0.263	0.146	0.243	0.084
TCRBV11_8	0.172	-0.023	-0.417	-0.758	-0.457
TCRBV11_9	-1.042	0.612	-0.205	-1.241	-1.087
TCRBV11_10	1.012	-0.917	0.936	0.819	-0.365
TCRBV11_11	1.613	0.243	0.545	0.251	0.750
TCRBV11_12	0.682	-0.543	0.273	0.916	0.850
TCRBV11_13	0.680	0.169	-0.085	0.438	0.498
TCRBV11_14	0.183	0.129	-0.200	0.194	0.027
TCRBV11_15	0.068	0.048	-0.074	0.072	0.010
TCRBV12_4	0.022	0.053	0.180	-0.065	-0.101
TCRBV12_5	1.110	-0.584	1.057	-0.068	-0.140
TCRBV12_6	-0.075	-0.769	0.467	0.097	-0.644
TCRBV12_7	-0.259	-1.402	0.689	-0.125	-1.174
TCRBV12_8	0.087	-0.402	0.187	-0.477	-0.052
TCRBV12_9	0.119	0.966	-0.925	1.005	0.253
TCRBV12_10	-2.043	1.000	-0.114	-0.685	0.668
TCRBV12_11	0.547	0.877	-1.581	0.308	0.942
TCRBV12_12	0.492	0.262	0.041	0.011	0.249
TCRBV13_5	0.121	0.015	-0.081	-0.017	0.009
TCRBV13_6	-1.169	0.258	0.295	0.299	0.480
TCRBV13_7	0.554	1.274	0.108	-0.247	-0.776
TCRBV13_8	-0.691	-0.703	-1.262	0.501	-0.489
TCRBV13_9	0.455	0.203	0.486	-0.737	0.389
TCRBV13_10	-0.196	-0.138	1.183	0.206	-0.237
TCRBV13_11	0.740	-0.070	-0.809	-0.165	0.427
TCRBV13_12	0.053	-0.160	0.256	0.096	0.192
TCRBV13_13	0.132	-0.680	-0.176	0.063	0.005
TCRBV14_5	0.308	0.021	-0.164	-0.004	-0.105
TCRBV14_6	0.564	0.312	-0.184	-0.277	0.014
TCRBV14_7	1.453	-0.325	0.497	-0.407	-0.207
TCRBV14_8	0.303	-0.679	-0.102	0.386	0.164
TCRBV14_9	-0.497	-0.954	-0.253	-0.098	-0.256
TCRBV14_10	-1.038	1.158	-0.080	-0.496	-0.094
TCRBV14_11	-1.230	0.427	0.330	0.618	0.386
TCRBV14_12	0.086	0.023	-0.003	0.211	0.073
TCRBV14_13	0.052	0.017	-0.041	0.066	0.025
TCRBV15_4	-0.022	0.052	0.015	-0.064	0.065
TCRBV15_5	-0.051	1.008	-1.136	0.049	-0.596
TCRBV15_6	-0.773	-0.068	0.204	0.636	-0.051
TCRBV15_7	-1.179	-0.041	-0.204	0.111	-0.181

FIG.102B

TCRBV15_8	0.828	0.729	-0.001	0.308	0.060
TCRBV15_9	1.208	0.830	1.383	-0.416	0.418
TCRBV15_10	0.580	-1.442	0.006	0.863	0.370
TCRBV15_11	0.879	-0.697	0.040	-0.025	0.349
TCRBV15_12	0.276	-0.312	-0.008	-0.065	-0.163
TCRBV16_5	-0.131	0.237	0.055	0.198	-0.079
TCRBV16_6	-0.499	0.666	-0.886	1.169	0.117
TCRBV16_7	-0.295	0.423	-0.001	-1.066	0.136
TCRBV16_8	-0.055	0.742	0.373	1.006	0.007
TCRBV16_9	0.553	-0.298	-0.533	0.181	-1.618
TCRBV16_10	-0.445	0.654	-2.438	-0.383	0.453
TCRBV16_11	1.179	-0.232	2.576	0.828	0.555
TCRBV16_12	1.234	-1.220	0.280	-1.105	-0.258
TCRBV16_13	0.110	0.115	0.051	-0.121	-0.053
TCRBV18_3	0.002	-0.007	0.012	0.016	-0.028
TCRBV18_4	-0.345	0.670	0.183	0.552	-0.536
TCRBV18_5	-0.407	0.864	0.120	0.568	-0.878
TCRBV18_6	-0.245	0.101	0.120	0.372	-2.058
TCRBV18_7	-1.112	-0.788	-0.503	0.752	0.228
TCRBV18_8	0.099	-1.862	0.205	-0.204	1.216
TCRBV18_9	0.612	-0.109	-0.765	0.095	0.892
TCRBV18_10	0.873	-0.445	-0.474	-0.505	0.795
TCRBV18_11	0.327	0.278	-0.587	0.179	-0.186
TCRBV18_12	0.117	0.057	-0.029	0.069	-0.053
TCRBV18_13	-0.060	0.025	0.067	-0.066	0.020
TCRBV20_5	-0.155	-0.149	-0.129	0.106	-0.029
TCRBV20_6	-0.480	0.164	-0.032	0.041	0.879
TCRBV20_7	0.101	-0.950	0.416	-0.827	-0.719
TCRBV20_8	-0.927	-1.448	0.547	0.407	1.055
TCRBV20_9	1.665	-0.690	-0.903	0.222	-1.122
TCRBV20_10	-0.152	0.082	0.733	1.987	0.025
TCRBV20_11	1.612	1.397	0.181	-0.414	0.622
TCRBV20_12	0.094	0.274	0.268	-0.489	0.438
TCRBV20_13	0.006	1.336	-0.794	0.415	-0.930
TCRBV20_14	-0.018	0.042	0.012	-0.052	0.052

	26	27	28	29	30
TCRBV01_6	-0.202	-0.173	-0.047	0.033	0.145
TCRBV01_7	-0.078	-0.189	0.155	0.172	-0.121
TCRBV01_8	0.777	0.327	0.297	0.175	0.398
TCRBV01_9	0.358	0.670	-0.505	-1.099	-1.170
TCRBV01_10	0.181	0.121	-0.041	0.488	0.052
TCRBV01_11	0.142	0.104	0.155	0.100	0.322
TCRBV01_12	0.180	-0.363	-0.174	0.290	0.364
TCRBV01_13	0.092	0.227	0.053	0.046	-0.015
TCRBV01_14	0.021	0.030	0.018	-0.007	0.004
TCRBV02_6	0.003	0.027	-0.094	0.174	0.716
TCRBV02_7	0.504	-0.302	-0.266	0.158	-0.047
TCRBV02_8	-0.324	-0.440	-0.028	-0.282	0.282
TCRBV02_9	-1.091	0.926	0.506	0.292	-0.324
TCRBV02_10	-0.999	0.221	0.548	-0.144	0.010
TCRBV02_11	-0.992	0.143	-0.135	-0.056	-0.027
TCRBV02_12	-0.464	-0.114	0.553	-0.206	0.057
TCRBV02_13	-0.078	-0.051	-0.008	-0.158	0.002
TCRBV03_4	0.089	-0.011	-0.028	0.006	-0.017
TCRBV03_5	-0.011	-0.028	0.016	0.096	-0.002
TCRBV03_6	0.558	-0.170	0.019	0.282	-0.220
TCRBV03_7	0.303	-0.272	0.535	-0.055	-0.301
TCRBV03_8	-0.346	-0.173	1.131	-0.456	-0.218
TCRBV03_9	-0.599	-0.208	-0.268	-0.890	0.365
TCRBV03_10	0.111	0.363	0.357	0.032	0.553
TCRBV03_11	0.539	0.257	-0.549	0.608	-0.206

FIG.102C

TCRBV03_12	0.462	-0.235	-0.704	0.351	0.054
TCRBV03_13	0.364	1.230	-0.599	0.225	-0.028
TCRBV04_6	-0.077	0.040	0.017	0.051	0.045
TCRBV04_7	0.065	-0.373	0.127	0.131	0.327
TCRBV04_8	0.501	-0.621	-0.021	0.118	-0.199
TCRBV04_9	0.646	-1.073	0.121	0.612	-0.214
TCRBV04_10	-0.266	0.339	-0.595	-1.448	-0.492
TCRBV04_11	-0.192	0.607	-0.088	0.668	-0.148
TCRBV04_12	-0.249	0.168	0.115	0.937	0.617
TCRBV04_13	-0.147	0.626	-0.038	-0.248	0.120
TCRBV04_14	-0.370	0.090	0.280	-0.437	-0.093
TCRBV04_15	0.088	0.198	0.080	-0.383	0.038
TCRBV051_5	0.095	-0.072	-0.117	0.091	0.322
TCRBV051_6	0.300	-0.742	-0.158	0.665	-0.061
TCRBV051_7	1.154	0.150	0.548	-0.309	0.131
TCRBV051_8	-1.168	-0.692	-0.229	-0.912	0.212
TCRBV051_9	0.976	1.173	1.475	0.917	-0.242
TCRBV051_10	-1.264	0.031	-0.311	0.388	-0.368
TCRBV051_11	0.470	0.370	0.480	-0.433	0.694
TCRBV051_12	-0.706	-0.664	-0.425	0.434	0.334
TCRBV051_13	-0.006	0.036	-0.079	-0.212	0.323
TCRBV052_6	-0.000	-0.001	0.129	-0.560	0.064
TCRBV052_7	-0.333	0.676	0.304	-0.790	0.025
TCRBV052_8	-0.546	-0.549	0.473	-0.043	0.581
TCRBV052_9	0.330	-0.116	-0.366	0.897	-0.606
TCRBV052_10	-0.455	-0.901	0.349	0.189	0.489
TCRBV052_11	0.885	0.292	0.343	0.291	0.434
TCRBV052_12	0.151	0.068	-0.110	0.506	0.378
TCRBV052_13	-0.182	0.121	0.060	0.139	-0.017
TCRBV06_5	0.019	-0.053	0.071	0.071	0.009
TCRBV06_6	-0.364	-0.263	0.103	0.178	-0.106
TCRBV06_7	0.036	-0.190	0.745	0.582	-0.091
TCRBV06_8	-0.246	-0.401	0.456	-0.169	-0.512
TCRBV06_9	-1.055	0.098	0.255	0.189	-0.909
TCRBV06_10	0.811	1.255	-0.533	-0.726	0.203
TCRBV06_11	1.757	0.041	-0.638	-0.549	0.587
TCRBV06_12	0.007	-0.043	-0.614	0.246	0.821
TCRBV06_13	0.505	0.310	0.064	0.379	-0.023
TCRBV07_5	-0.008	-0.009	0.025	-0.037	-0.034
TCRBV07_6	0.158	0.794	-0.811	-0.267	0.119
TCRBV07_7	0.186	0.154	-0.658	-0.270	0.274
TCRBV07_8	-0.102	-0.646	-0.247	0.820	-0.469
TCRBV07_9	0.988	0.655	0.107	-1.057	-0.005
TCRBV07_10	-0.005	-0.136	0.508	0.254	0.536
TCRBV07_11	0.947	0.498	0.487	0.199	-0.428
TCRBV07_12	-0.505	-0.544	0.455	0.428	-0.000
TCRBV07_13	-0.188	-0.013	0.043	0.130	-0.013
TCRBV081_5	0.015	-0.163	-0.033	0.165	0.068
TCRBV081_6	0.340	-0.221	0.134	-0.209	0.390
TCRBV081_7	0.196	0.983	0.882	-0.781	0.283
TCRBV081_8	0.018	0.290	1.469	-0.344	0.362
TCRBV081_9	-0.341	0.693	0.100	0.604	-0.275
TCRBV081_10	-0.120	-0.935	-0.876	-0.295	0.917
TCRBV081_11	-0.066	-0.504	-0.345	0.167	-0.487
TCRBV081_12	-0.043	-0.144	-1.332	0.692	-1.259
TCRBV082_4	-0.267	0.115	0.380	0.258	0.345
TCRBV082_5	-0.027	0.511	-0.006	0.191	0.217
TCRBV082_6	-0.029	0.512	0.684	0.553	0.447
TCRBV082_7	-0.075	0.719	-0.209	0.577	0.049
TCRBV082_8	-0.099	-0.784	-0.190	-0.494	-0.021
TCRBV082_9	0.376	-0.543	-0.367	-0.632	-0.330
TCRBV082_10	-0.155	-0.423	-0.153	-0.418	-0.374
TCRBV082_11	0.275	-0.108	-0.139	-0.034	-0.332
TCRBV083_4	0.026	0.095	-0.041	0.017	-0.000

FIG. 102D

TCRBV083_5	-0.095	-0.090	-0.301	0.208	-0.310
TCRBV083_6	-0.365	0.072	-0.393	0.206	-0.193
TCRBV083_7	-0.307	0.082	-0.850	0.039	-0.266
TCRBV083_8	-0.246	0.198	-0.447	0.165	0.648
TCRBV083_9	0.032	-0.558	0.305	-0.293	-0.202
TCRBV083_10	0.487	0.366	0.362	-0.291	-0.267
TCRBV083_11	0.254	-0.423	0.741	0.074	0.065
TCRBV083_12	0.212	0.258	0.623	-0.126	0.525
TCRBV09_5	-0.009	-0.187	-0.075	0.104	0.032
TCRBV09_6	-0.060	-0.095	0.170	-0.202	0.084
TCRBV09_7	-0.322	-0.221	0.730	0.444	-0.431
TCRBV09_8	-0.200	-0.387	-0.064	-0.400	-0.451
TCRBV09_9	-1.272	-0.683	1.048	0.775	-0.097
TCRBV09_10	-0.704	0.103	-1.093	0.460	0.947
TCRBV09_11	0.085	-1.288	0.082	0.418	0.021
TCRBV09_12	-0.859	0.702	-1.093	-0.856	0.552
TCRBV09_13	-0.235	0.495	-0.389	-0.297	-0.352
TCRBV09_14	-0.100	0.184	0.152	0.069	0.097
TCRBV09_15	-0.017	0.068	0.041	0.042	-0.074
TCRBV10_6	0.297	0.039	0.045	-0.334	0.420
TCRBV10_7	0.439	-0.491	0.188	0.207	0.390
TCRBV10_8	0.633	0.591	0.583	-0.091	0.481
TCRBV10_9	0.639	0.461	0.981	-0.555	-0.853
TCRBV10_10	0.389	-0.797	-0.232	-0.116	-0.167
TCRBV10_11	-1.769	0.224	-0.595	0.531	-0.325
TCRBV10_12	-0.671	-0.022	-0.956	0.355	0.062
TCRBV10_13	0.043	-0.005	-0.013	0.003	-0.008
TCRBV11_5	0.092	0.215	-0.106	0.099	0.087
TCRBV11_6	0.025	-0.117	0.066	0.195	0.215
TCRBV11_7	0.289	0.254	-0.198	0.658	-0.015
TCRBV11_8	0.671	-0.420	0.403	0.608	0.132
TCRBV11_9	0.102	0.910	0.055	-0.293	-0.308
TCRBV11_10	0.501	0.385	-0.148	-0.130	-0.076
TCRBV11_11	0.001	0.372	-0.022	-0.481	0.018
TCRBV11_12	-0.534	-0.716	-0.048	-0.342	0.086
TCRBV11_13	0.055	-0.098	-0.010	-0.133	-0.107
TCRBV11_14	0.194	-0.023	-0.061	0.013	-0.038
TCRBV11_15	0.072	-0.009	-0.023	0.005	-0.014
TCRBV12_4	0.063	0.093	-0.032	0.160	0.048
TCRBV12_5	0.547	0.406	-0.901	0.493	-0.088
TCRBV12_6	0.015	-0.262	-0.075	-0.603	0.862
TCRBV12_7	-0.338	-0.765	-0.332	-0.421	0.136
TCRBV12_8	-0.346	0.402	0.469	0.321	-0.268
TCRBV12_9	0.128	-0.130	0.618	0.256	-0.225
TCRBV12_10	-0.084	0.212	-0.067	0.144	-0.508
TCRBV12_11	0.065	-0.002	0.339	-0.119	-0.125
TCRBV12_12	-0.049	0.045	-0.018	-0.232	0.168
TCRBV13_5	0.134	-0.043	-0.026	-0.075	-0.077
TCRBV13_6	-0.455	0.187	-0.305	0.187	-0.607
TCRBV13_7	1.379	0.112	-0.400	0.364	0.455
TCRBV13_8	-0.206	-0.742	0.866	0.551	-0.291
TCRBV13_9	-0.552	1.274	0.468	0.356	0.763
TCRBV13_10	-0.064	-0.313	0.061	-0.774	-0.327
TCRBV13_11	-0.172	-0.645	-0.488	-0.527	-0.411
TCRBV13_12	0.022	0.212	-0.287	-0.298	0.283
TCRBV13_13	-0.087	-0.042	0.111	0.217	0.213
TCRBV14_5	0.043	-0.197	-0.047	0.044	-0.007
TCRBV14_6	0.033	-0.131	0.080	0.067	-0.056
TCRBV14_7	0.549	0.205	0.166	-0.187	0.236
TCRBV14_8	-0.499	0.691	0.235	0.008	-0.218
TCRBV14_9	0.479	0.757	-0.523	0.098	0.099
TCRBV14_10	-1.073	-0.076	-0.466	-0.276	-0.006
TCRBV14_11	0.382	-1.236	0.478	0.254	-0.056
TCRBV14_12	0.029	-0.014	0.115	-0.001	0.042

FIG. 103A

TCRBV14_13	0.056	0.001	-0.038	-0.008	-0.034
TCRBV15_4	-0.012	-0.074	0.008	-0.185	-0.024
TCRBV15_5	-0.333	0.810	-0.200	0.363	0.228
TCRBV15_6	0.096	0.049	-0.169	0.347	0.092
TCRBV15_7	1.306	-0.907	-0.742	0.105	0.265
TCRBV15_8	0.958	0.577	-0.079	-0.265	-0.664
TCRBV15_9	0.368	0.137	-0.007	0.657	-0.303
TCRBV15_10	-0.563	0.401	0.636	-0.747	0.476
TCRBV15_11	-0.275	-0.223	0.463	-0.132	-0.037
TCRBV15_12	-0.074	-0.016	-0.002	0.057	-0.056
TCRBV16_5	0.002	0.162	0.110	-0.150	0.038
TCRBV16_6	0.245	1.253	-0.268	0.049	-0.097
TCRBV16_7	1.056	0.195	0.512	0.207	-0.292
TCRBV16_8	1.032	-1.770	-0.134	-0.369	0.366
TCRBV16_9	-0.786	0.057	0.661	-0.379	0.802
TCRBV16_10	0.052	0.426	0.296	0.136	-0.490
TCRBV16_11	-0.134	0.080	0.459	1.341	0.655
TCRBV16_12	-0.373	-0.169	-0.732	-0.136	0.291
TCRBV16_13	0.227	0.109	0.187	0.131	0.054
TCRBV18_3	-0.011	-0.018	-0.005	0.012	-0.006
TCRBV18_4	-0.385	0.155	0.296	-0.584	-0.075
TCRBV18_5	-1.028	-0.527	0.357	-0.442	0.315
TCRBV18_6	-1.260	0.842	0.617	-0.909	-0.125
TCRBV18_7	-0.193	-1.547	-0.017	-0.470	-0.537
TCRBV18_8	-1.171	1.573	-0.965	1.106	0.010
TCRBV18_9	-0.879	-0.272	0.121	0.609	1.186
TCRBV18_10	0.039	-0.131	0.680	0.363	-0.174
TCRBV18_11	0.204	-0.378	0.270	-0.017	-0.215
TCRBV18_12	0.103	0.052	0.174	0.010	0.103
TCRBV18_13	0.014	-0.029	0.011	0.067	0.033
TCRBV20_5	0.280	0.036	-0.046	0.038	0.125
TCRBV20_6	0.542	-0.193	-0.693	-0.806	0.759
TCRBV20_7	0.607	0.076	0.128	-0.035	0.560
TCRBV20_8	-0.045	0.321	0.621	0.470	0.751
TCRBV20_9	0.289	0.033	-0.723	1.306	0.168
TCRBV20_10	0.205	-0.131	0.222	0.118	-2.418
TCRBV20_11	-0.540	0.134	0.724	-0.342	-0.123
TCRBV20_12	0.086	-0.456	0.225	-0.390	0.227
TCRBV20_13	0.054	0.993	-0.555	-0.010	-0.050
TCRBV20_14	-0.009	-0.060	0.007	-0.150	-0.019
	31	32	33	34	35
TCRBV01_6	-0.018	0.070	0.011	0.093	0.015
TCRBV01_7	0.623	0.102	0.195	0.141	0.047
TCRBV01_8	0.678	-0.704	0.327	-0.704	0.059
TCRBV01_9	0.879	1.282	0.305	0.333	0.123
TCRBV01_10	-0.250	0.005	-0.065	-0.239	-0.013
TCRBV01_11	-1.133	-0.810	-0.609	0.385	-0.278
TCRBV01_12	-0.410	0.356	-0.278	-0.117	-0.078
TCRBV01_13	-0.154	-0.135	-0.249	-0.156	-0.062
TCRBV01_14	0.006	-0.005	0.005	0.009	-0.021
TCRBV02_6	0.177	0.356	-0.049	0.221	0.287
TCRBV02_7	-0.560	0.001	-0.021	-0.055	0.303
TCRBV02_8	0.353	-0.334	0.209	-0.125	0.170
TCRBV02_9	0.090	-0.538	-0.084	1.106	0.298
TCRBV02_10	0.124	0.199	0.518	0.361	-0.133
TCRBV02_11	0.075	0.057	0.255	0.155	-0.296
TCRBV02_12	-0.547	-0.180	0.474	-0.264	-0.089
TCRBV02_13	-0.026	-0.190	0.304	-0.027	0.105
TCRBV03_4	0.008	0.016	-0.042	-0.036	-0.017
TCRBV03_5	-0.042	0.028	-0.033	0.072	0.015
TCRBV03_6	0.674	-0.302	-0.291	-0.348	0.138

FIG 103B

TCRBV03_7	0.077	-0.182	0.433	0.105	-0.334
TCRBV03_8	0.153	-0.595	0.393	-0.247	0.172
TCRBV03_9	-0.075	0.146	0.024	-0.469	0.315
TCRBV03_10	-0.903	0.337	-0.269	0.435	-0.141
TCRBV03_11	0.134	0.223	0.046	0.759	-0.637
TCRBV03_12	-0.009	0.547	-0.302	0.033	0.410
TCRBV03_13	0.203	-0.056	-0.318	-0.559	-0.130
TCRBV04_6	-0.079	0.050	-0.030	-0.049	0.007
TCRBV04_7	-0.166	0.108	-0.211	-0.025	-0.197
TCRBV04_8	0.598	-0.612	-0.079	0.431	0.285
TCRBV04_9	0.604	0.005	-0.715	0.115	0.306
TCRBV04_10	-0.869	-0.510	0.181	0.371	0.542
TCRBV04_11	-0.614	0.128	0.423	-0.830	0.603
TCRBV04_12	0.461	0.316	1.297	0.276	0.287
TCRBV04_13	0.010	0.803	-0.832	-0.224	-0.893
TCRBV04_14	-0.101	-0.435	-0.146	-0.098	-0.736
TCRBV04_15	0.156	0.146	0.111	0.032	-0.204
TCRBV051_5	-0.354	-0.499	0.016	-0.014	-0.017
TCRBV051_6	0.230	0.114	-0.261	0.300	0.279
TCRBV051_7	-0.467	-0.417	0.229	-0.036	0.325
TCRBV051_8	0.200	-0.266	-0.052	0.210	0.148
TCRBV051_9	0.160	0.982	0.835	-0.258	0.613
TCRBV051_10	0.310	-0.280	-0.588	-0.172	0.265
TCRBV051_11	0.081	0.011	-0.039	0.675	-0.050
TCRBV051_12	-0.019	-0.744	-0.175	0.560	-0.864
TCRBV051_13	-0.153	-0.109	0.157	-0.028	0.013
TCRBV052_6	-0.062	-0.094	0.049	0.262	-0.220
TCRBV052_7	-0.403	0.096	0.157	0.340	-0.075
TCRBV052_8	0.253	-0.176	-0.081	0.102	0.196
TCRBV052_9	-0.459	-0.266	0.223	0.438	0.427
TCRBV052_10	0.864	-1.009	-0.094	0.035	-0.119
TCRBV052_11	-0.329	0.277	-0.042	0.137	0.406
TCRBV052_12	0.216	-0.078	-0.036	-0.036	0.116
TCRBV052_13	-0.092	0.043	-0.054	-0.041	-0.019
TCRBV06_5	0.114	-0.034	0.034	-0.001	-0.124
TCRBV06_6	-0.184	0.180	0.164	-0.162	-0.180
TCRBV06_7	-0.416	0.498	-0.096	-0.261	-0.044
TCRBV06_8	-0.696	0.805	-0.729	-0.191	-0.012
TCRBV06_9	-0.263	0.019	-0.086	-0.087	-0.739
TCRBV06_10	1.044	-0.719	0.273	0.282	-0.062
TCRBV06_11	0.154	-0.814	-0.162	0.123	0.634
TCRBV06_12	0.398	0.386	0.232	-0.107	0.023
TCRBV06_13	0.068	-0.158	0.011	0.150	0.296
TCRBV07_5	-0.014	0.008	0.026	0.010	-0.045
TCRBV07_6	0.266	-0.215	-0.050	-0.478	-0.042
TCRBV07_7	0.565	0.110	0.458	-0.355	-0.371
TCRBV07_8	0.355	0.039	-0.635	0.109	-0.063
TCRBV07_9	-0.133	0.051	-0.807	-0.165	-0.325
TCRBV07_10	-0.434	-0.074	0.342	-0.064	0.125
TCRBV07_11	-0.193	-0.166	0.054	0.216	0.109
TCRBV07_12	-0.105	0.356	0.230	0.322	0.368
TCRBV07_13	-0.085	0.053	0.023	0.150	0.035
TCRBV081_5	-0.043	-0.155	0.061	-0.013	0.023
TCRBV081_6	-0.521	-0.078	-0.159	0.379	0.099
TCRBV081_7	0.071	-0.461	-0.553	-0.047	0.469
TCRBV081_8	0.097	0.174	-0.233	0.237	-0.259
TCRBV081_9	-0.131	-0.053	0.365	-0.281	0.149
TCRBV081_10	0.496	0.811	0.419	0.083	-0.839
TCRBV081_11	0.105	-0.036	0.002	0.278	0.130
TCRBV081_12	-0.075	-0.202	0.097	-0.636	0.228
TCRBV082_4	-0.097	-0.014	0.054	-0.097	-0.018
TCRBV082_5	0.278	0.205	0.313	-0.058	0.042
TCRBV082_6	0.236	-0.162	0.086	-0.188	-0.378
TCRBV082_7	-0.109	0.677	-0.027	-0.006	0.737

FIG. 103C

TCRBV082_8	-0.328	-1.074	-0.302	-0.826	-0.273
TCRBV082_9	0.182	0.031	-0.251	0.364	0.188
TCRBV082_10	-0.042	-0.133	-0.021	0.497	-0.293
TCRBV082_11	-0.120	0.470	0.148	0.315	-0.005
TCRBV083_4	0.011	0.001	-0.022	-0.035	-0.012
TCRBV083_5	0.241	0.045	0.267	-0.033	0.232
TCRBV083_6	0.132	-0.060	-0.261	0.134	-0.110
TCRBV083_7	0.253	0.005	-0.075	-0.952	-0.102
TCRBV083_8	0.120	-0.907	-0.038	-0.766	-0.009
TCRBV083_9	-0.464	0.315	-0.667	0.101	-0.169
TCRBV083_10	-0.447	0.596	0.062	0.659	0.167
TCRBV083_11	-0.067	0.051	0.413	0.476	0.093
TCRBV083_12	0.220	-0.046	0.321	0.416	-0.089
TCRBV09_5	0.128	-0.013	0.123	-0.036	0.038
TCRBV09_6	0.167	0.254	0.074	-0.044	0.353
TCRBV09_7	0.397	-0.556	-0.991	0.735	0.063
TCRBV09_8	-0.781	-0.127	0.403	-0.989	0.418
TCRBV09_9	-0.324	0.277	-0.097	0.104	0.126
TCRBV09_10	-0.403	-0.411	0.159	-0.153	-0.023
TCRBV09_11	-0.187	-0.146	0.805	-0.018	-0.623
TCRBV09_12	0.036	0.309	0.061	0.566	0.809
TCRBV09_13	0.162	0.200	0.169	-0.007	0.519
TCRBV09_14	0.083	0.131	0.191	0.146	0.384
TCRBV09_15	0.085	0.039	-0.055	0.056	0.118
TCRBV10_6	-0.113	0.027	-0.019	0.123	0.386
TCRBV10_7	-0.171	0.507	-0.384	-0.329	-0.007
TCRBV10_8	0.490	0.194	-0.171	-0.715	-0.123
TCRBV10_9	-0.034	0.230	0.320	-0.004	0.281
TCRBV10_10	-0.116	-0.723	-0.345	0.160	-0.111
TCRBV10_11	-0.172	-0.027	0.380	0.802	-0.495
TCRBV10_12	0.112	-0.217	0.238	-0.020	0.077
TCRBV10_13	0.004	0.008	-0.020	-0.017	-0.008
TCRBV11_5	-0.079	-0.146	0.011	0.258	0.144
TCRBV11_6	0.003	0.344	-0.289	0.575	0.199
TCRBV11_7	-0.201	-0.186	-0.099	-0.030	-0.017
TCRBV11_8	0.635	-0.145	-0.442	-0.239	-0.470
TCRBV11_9	0.743	0.179	-0.476	-0.048	0.143
TCRBV11_10	-0.094	0.223	0.044	-0.495	-0.530
TCRBV11_11	-0.303	0.099	0.288	-0.166	0.087
TCRBV11_12	-0.373	-0.268	0.534	0.036	0.127
TCRBV11_13	-0.135	0.014	0.195	-0.038	0.157
TCRBV11_14	0.018	0.036	-0.091	-0.078	-0.036
TCRBV11_15	0.007	0.013	-0.034	-0.029	-0.013
TCRBV12_4	-0.099	-0.217	-0.014	0.035	-0.128
TCRBV12_5	0.146	0.283	0.133	-0.088	0.231
TCRBV12_6	-0.572	0.562	0.620	-0.135	-0.459
TCRBV12_7	-0.110	0.756	0.188	0.522	-0.425
TCRBV12_8	0.998	-0.035	-0.218	0.107	0.043
TCRBV12_9	-0.411	-0.734	-0.346	0.297	-0.174
TCRBV12_10	0.350	0.160	-0.358	-0.199	0.532
TCRBV12_11	-0.478	-0.797	-0.041	-0.376	0.322
TCRBV12_12	0.177	0.022	0.035	-0.163	0.059
TCRBV13_5	0.017	0.160	-0.027	0.060	0.074
TCRBV13_6	-0.872	0.024	0.039	0.464	0.107
TCRBV13_7	-0.199	-0.169	0.253	0.467	0.249
TCRBV13_8	-0.088	-0.105	0.282	0.132	-0.070
TCRBV13_9	-0.083	-1.220	0.259	0.033	0.152
TCRBV13_10	0.578	0.035	0.060	-0.578	-0.353
TCRBV13_11	0.477	0.749	-0.481	-0.104	0.251
TCRBV13_12	0.133	0.295	-0.610	-0.119	-0.314
TCRBV13_13	0.037	0.231	0.226	-0.355	-0.098
TCRBV14_5	-0.013	0.073	0.025	0.045	0.085
TCRBV14_6	0.097	0.038	0.240	-0.049	-0.053
TCRBV14_7	-0.070	-0.196	-0.172	0.238	0.203

FIG. 103D

TCRBV14_8	0.034	0.097	-0.329	0.191	-0.224
TCRBV14_9	-0.249	-0.531	-0.014	0.168	-0.416
TCRBV14_10	0.260	0.504	-0.177	-0.209	-0.169
TCRBV14_11	0.022	0.008	0.245	-0.484	0.642
TCRBV14_12	-0.087	-0.024	0.209	0.144	-0.046
TCRBV14_13	0.005	0.031	-0.027	-0.043	-0.023
TCRBV15_4	-0.028	-0.129	0.355	0.011	0.126
TCRBV15_5	0.215	0.049	-0.463	-0.431	-0.207
TCRBV15_6	0.127	0.098	0.479	-0.055	0.071
TCRBV15_7	-0.173	0.226	0.370	0.105	0.203
TCRBV15_8	0.674	-0.573	0.558	0.429	-0.784
TCRBV15_9	-0.963	0.331	-0.454	0.042	0.252
TCRBV15_10	0.137	0.252	-0.874	-0.452	-0.020
TCRBV15_11	0.204	0.038	-0.347	0.101	0.098
TCRBV15_12	0.029	-0.129	0.019	-0.005	0.053
TCRBV16_5	0.028	0.102	0.061	0.021	-0.190
TCRBV16_6	-0.263	-0.318	0.050	0.486	-0.358
TCRBV16_7	0.632	0.089	0.880	0.459	-0.717
TCRBV16_8	-0.921	-0.349	0.855	-0.423	-0.181
TCRBV16_9	0.530	-0.300	-0.991	-0.228	1.081
TCRBV16_10	0.002	-0.277	0.147	0.423	0.007
TCRBV16_11	0.253	0.024	-0.740	0.006	-0.182
TCRBV16_12	-0.177	0.070	-0.478	0.198	1.037
TCRBV16_13	0.124	-0.088	-0.019	0.040	0.008
TCRBV18_3	0.029	-0.024	-0.038	0.032	0.011
TCRBV18_4	0.086	0.210	0.155	0.049	-0.296
TCRBV18_5	-0.019	0.319	0.319	-0.147	0.718
TCRBV18_6	-0.666	-0.215	0.426	-0.088	0.177
TCRBV18_7	1.820	-0.588	0.247	0.764	0.904
TCRBV18_8	0.018	-0.401	0.714	0.179	0.365
TCRBV18_9	0.381	0.330	0.507	-0.398	0.234
TCRBV18_10	0.151	0.406	0.369	-0.072	0.259
TCRBV18_11	0.216	0.575	-0.400	-0.179	0.029
TCRBV18_12	-0.002	-0.025	-0.043	0.052	-0.086
TCRBV18_13	-0.087	-0.101	-0.013	0.007	-0.001
TCRBV20_5	-0.131	-0.110	0.019	0.173	0.201
TCRBV20_6	-0.637	0.239	-0.235	0.837	0.197
TCRBV20_7	-0.381	0.078	-0.016	0.078	0.143
TCRBV20_8	0.211	0.227	-0.198	-0.297	-0.068
TCRBV20_9	-0.155	0.173	-0.877	0.386	-0.219
TCRBV20_10	-0.412	-0.519	0.084	-0.685	0.109
TCRBV20_11	0.588	0.092	0.394	-0.291	-0.454
TCRBV20_12	0.857	0.133	0.160	-0.181	-0.046
TCRBV20_13	0.304	-0.047	0.025	-0.284	-0.174
TCRBV20_14	-0.023	-0.104	0.287	0.009	0.102

	36	37	38	39	40
TCRBV01_6	-0.081	-0.005	-0.041	-0.011	0.038
TCRBV01_7	-0.012	-0.180	0.064	0.238	0.174
TCRBV01_8	-0.570	0.176	-0.114	0.201	0.386
TCRBV01_9	0.027	-0.269	-0.088	0.785	0.246
TCRBV01_10	-0.102	-0.319	0.148	-0.837	0.349
TCRBV01_11	0.662	0.414	-0.212	-0.263	-0.554
TCRBV01_12	0.612	0.048	0.305	-0.231	-0.341
TCRBV01_13	0.129	0.109	0.084	-0.090	-0.272
TCRBV01_14	0.017	-0.017	-0.003	0.008	0.012
TCRBV02_6	0.027	0.051	0.091	0.286	-0.029
TCRBV02_7	0.190	-0.274	0.161	0.209	-0.089
TCRBV02_8	0.071	-0.413	0.051	-0.401	-0.267
TCRBV02_9	-0.014	0.038	0.122	-0.125	0.164
TCRBV02_10	-0.053	-0.372	0.170	0.094	0.020
TCRBV02_11	0.123	-0.426	-0.531	0.345	0.367

FIG. 104A

TCRBV02_12	-0.112	0.175	0.088	0.240	-0.046
TCRBV02_13	-0.228	0.061	0.010	-0.029	0.052
TCRBV03_4	-0.000	0.030	-0.004	-0.016	-0.004
TCRBV03_5	-0.008	-0.040	-0.017	0.024	0.000
TCRBV03_6	0.256	0.463	-0.027	-0.203	-0.102
TCRBV03_7	0.174	0.134	-0.040	-0.507	-0.188
TCRBV03_8	0.045	0.050	-0.375	0.013	-0.497
TCRBV03_9	-0.361	-0.221	-0.084	0.496	-0.451
TCRBV03_10	0.320	0.304	0.332	-0.249	0.619
TCRBV03_11	-0.485	-0.367	0.306	0.237	0.083
TCRBV03_12	0.322	-0.395	0.179	0.134	0.452
TCRBV03_13	0.420	0.000	-0.126	-0.129	0.126
TCRBV04_6	-0.010	-0.023	0.009	-0.045	0.027
TCRBV04_7	0.166	-0.143	0.275	-0.197	0.027
TCRBV04_8	-0.405	-0.386	0.099	0.152	-0.010
TCRBV04_9	-0.884	0.005	-0.228	0.168	0.463
TCRBV04_10	0.321	-0.472	-0.614	-0.196	0.297
TCRBV04_11	0.246	0.584	-0.269	-0.161	0.213
TCRBV04_12	0.615	-0.365	0.698	0.239	0.074
TCRBV04_13	0.118	-0.093	-0.115	0.143	-0.668
TCRBV04_14	-0.229	0.912	-0.008	-0.073	-0.041
TCRBV04_15	0.062	-0.019	0.152	-0.030	-0.382
TCRBV051_5	0.099	0.220	-0.220	0.103	-0.138
TCRBV051_6	0.217	0.547	-0.239	-0.212	0.374
TCRBV051_7	0.190	0.310	-0.306	0.500	0.079
TCRBV051_8	0.257	0.064	0.223	0.123	-0.298
TCRBV051_9	-0.678	-0.295	-0.711	0.000	-0.043
TCRBV051_10	-0.118	-0.439	0.727	0.214	0.071
TCRBV051_11	-0.653	-0.542	0.310	0.083	-0.586
TCRBV051_12	0.525	0.306	0.484	-0.017	-0.192
TCRBV051_13	0.090	-0.024	0.369	0.341	0.287
TCRBV052_6	0.345	0.346	0.330	0.356	0.347
TCRBV052_7	0.030	-0.171	-0.721	-0.126	-0.001
TCRBV052_8	0.021	-0.075	0.017	0.067	-0.277
TCRBV052_9	-0.196	0.602	0.371	0.234	-0.052
TCRBV052_10	0.130	-0.388	0.273	0.417	0.100
TCRBV052_11	-0.249	0.024	0.205	0.184	-0.498
TCRBV052_12	-0.062	-0.200	0.121	0.022	-0.096
TCRBV052_13	-0.089	0.009	0.040	-0.018	0.033
TCRBV06_5	0.078	-0.029	0.024	-0.095	0.009
TCRBV06_6	0.271	-0.294	0.049	-0.043	-0.066
TCRBV06_7	0.310	-0.297	-0.242	0.058	-0.250
TCRBV06_8	0.483	0.370	-0.247	0.015	0.011
TCRBV06_9	-0.448	0.293	0.106	0.014	0.025
TCRBV06_10	-0.153	0.035	0.528	0.115	-0.405
TCRBV06_11	-0.281	-0.067	-0.067	0.047	0.211
TCRBV06_12	0.389	-0.026	-0.215	-0.238	0.453
TCRBV06_13	0.033	-0.026	0.206	-0.073	0.049
TCRBV07_5	-0.014	0.047	-0.039	0.011	0.018
TCRBV07_6	0.227	0.192	0.005	0.100	-0.283
TCRBV07_7	-0.263	-0.341	0.112	0.146	-0.545
TCRBV07_8	0.382	0.747	0.105	-0.413	0.006
TCRBV07_9	-0.333	0.133	0.263	-0.335	0.279
TCRBV07_10	0.391	-0.408	0.027	0.274	0.219
TCRBV07_11	-0.131	-0.503	0.002	0.113	0.271
TCRBV07_12	0.434	0.221	-0.291	-0.132	0.048
TCRBV07_13	-0.011	-0.130	-0.041	0.036	0.023
TCRBV081_5	0.086	0.032	0.056	-0.213	-0.105
TCRBV081_6	0.193	-0.201	0.136	-0.201	-0.024
TCRBV081_7	-0.095	-0.271	-0.059	-0.207	0.034
TCRBV081_8	0.206	-0.008	0.222	0.221	0.427
TCRBV081_9	0.407	-0.000	-0.423	0.244	-0.245
TCRBV081_10	-0.766	0.336	-0.617	-0.315	0.436
TCRBV081_11	0.065	0.307	0.349	0.129	0.242

FIG. 104B

TCRBV081_12	-0.096	-0.194	0.337	0.342	-0.766
TCRBV082_4	0.152	-0.014	0.246	0.425	0.007
TCRBV082_5	0.038	0.256	0.247	-0.130	-0.086
TCRBV082_6	0.416	-0.275	0.066	0.011	-0.159
TCRBV082_7	-0.087	0.454	0.092	-0.314	0.181
TCRBV082_8	0.059	-0.624	-0.209	0.080	0.439
TCRBV082_9	-0.152	0.156	-0.246	-0.202	-0.353
TCRBV082_10	-0.336	-0.006	-0.223	0.073	-0.089
TCRBV082_11	-0.091	0.053	0.027	0.056	0.060
TCRBV083_4	0.028	-0.002	-0.010	-0.008	0.011
TCRBV083_5	0.420	0.225	0.027	-0.068	0.065
TCRBV083_6	0.083	0.300	-0.001	-0.033	0.150
TCRBV083_7	0.160	0.325	0.076	-0.330	0.002
TCRBV083_8	-0.346	-0.023	0.080	-0.038	-0.493
TCRBV083_9	-0.127	-0.614	0.001	0.555	0.334
TCRBV083_10	0.047	-0.207	-0.094	0.227	-0.108
TCRBV083_11	-0.393	-0.111	0.051	-0.209	0.033
TCRBV083_12	0.128	0.106	-0.130	-0.095	0.006
TCRBV09_5	0.021	0.015	0.130	-0.037	0.037
TCRBV09_6	0.188	0.005	-0.215	0.126	-0.090
TCRBV09_7	-0.262	0.198	-0.043	0.581	-0.323
TCRBV09_8	0.032	0.027	0.687	-0.015	-0.227
TCRBV09_9	0.083	-0.639	0.675	-0.262	-0.329
TCRBV09_10	-1.054	0.658	-0.866	0.656	0.011
TCRBV09_11	0.516	0.151	-0.489	-0.221	0.162
TCRBV09_12	-0.028	-0.145	0.651	-0.889	0.185
TCRBV09_13	-0.131	-0.042	0.213	-0.218	-0.268
TCRBV09_14	-0.012	-0.079	-0.183	0.079	0.096
TCRBV09_15	-0.061	0.098	-0.021	-0.056	-0.017
TCRBV10_6	0.359	0.016	0.235	0.419	0.118
TCRBV10_7	-0.387	0.296	0.392	0.464	-0.202
TCRBV10_8	0.096	-0.255	-0.170	-0.041	-0.007
TCRBV10_9	-0.250	0.548	0.096	-0.434	-0.117
TCRBV10_10	0.248	-0.162	-0.131	-0.300	0.725
TCRBV10_11	0.012	-0.084	-0.251	0.056	-0.470
TCRBV10_12	-0.077	-0.374	-0.169	-0.158	-0.044
TCRBV10_13	-0.000	0.015	-0.002	-0.008	-0.002
TCRBV11_5	0.107	-0.065	0.064	-0.003	-0.075
TCRBV11_6	0.329	-0.004	-0.107	0.154	-0.308
TCRBV11_7	0.439	-0.370	-0.303	0.238	-0.027
TCRBV11_8	0.645	-0.675	-0.246	-0.410	0.190
TCRBV11_9	0.243	0.057	-0.314	-0.009	-0.196
TCRBV11_10	0.036	0.334	0.363	-0.026	0.098
TCRBV11_11	-0.266	0.096	0.118	0.047	0.154
TCRBV11_12	-0.542	0.435	0.614	-0.091	0.234
TCRBV11_13	-0.308	0.060	-0.033	-0.052	-0.020
TCRBV11_14	-0.000	0.066	-0.009	-0.035	-0.010
TCRBV11_15	-0.000	0.024	-0.003	-0.013	-0.004
TCRBV12_4	-0.133	0.057	-0.089	0.239	-0.197
TCRBV12_5	0.037	-0.293	0.115	0.011	-0.134
TCRBV12_6	-0.078	0.151	0.344	-0.135	-0.103
TCRBV12_7	-0.119	0.439	0.253	0.008	0.267
TCRBV12_8	0.405	0.615	0.094	0.038	0.418
TCRBV12_9	-0.107	-0.619	-0.186	-0.102	-0.025
TCRBV12_10	-0.187	-0.416	0.402	-0.327	0.340
TCRBV12_11	0.239	0.113	-0.603	0.127	-0.277
TCRBV12_12	-0.057	-0.048	-0.331	0.141	-0.288
TCRBV13_5	0.125	0.054	-0.022	-0.033	-0.056
TCRBV13_6	0.327	0.242	-0.202	0.243	0.075
TCRBV13_7	0.933	0.100	-0.126	0.077	-0.236
TCRBV13_8	-0.897	-0.610	0.189	-0.973	-0.351
TCRBV13_9	-0.423	0.468	0.312	0.527	0.871
TCRBV13_10	0.004	0.068	0.094	0.095	0.136
TCRBV13_11	-0.027	-0.156	-0.353	-0.034	-0.188

FIG. 104C

TCRBV13_12	0.119	-0.129	-0.114	0.024	0.072
TCRBV13_13	-0.162	-0.038	0.222	0.073	-0.324
TCRBV14_5	0.009	-0.013	-0.051	-0.040	-0.079
TCRBV14_6	0.190	-0.084	0.069	-0.140	0.054
TCRBV14_7	0.074	0.023	-0.029	0.180	-0.171
TCRBV14_8	-0.226	-0.005	-0.047	-0.146	0.573
TCRBV14_9	-0.079	0.382	0.203	-0.669	-0.508
TCRBV14_10	0.102	-0.655	-0.342	0.662	0.181
TCRBV14_11	0.020	0.316	0.204	0.218	-0.145
TCRBV14_12	-0.091	0.021	0.007	-0.035	0.090
TCRBV14_13	0.001	0.016	-0.014	-0.030	0.005
TCRBV15_4	-0.212	-0.004	0.003	-0.016	0.010
TCRBV15_5	0.136	-0.135	0.161	0.079	-0.009
TCRBV15_6	-0.541	-0.191	-0.169	-0.404	-0.006
TCRBV15_7	0.265	0.696	-0.099	-0.147	0.133
TCRBV15_8	0.413	-0.865	-0.073	-0.630	0.245
TCRBV15_9	-0.463	0.061	-0.047	0.195	-0.436
TCRBV15_10	0.575	0.393	0.342	0.538	0.152
TCRBV15_11	0.475	0.120	0.024	0.145	-0.039
TCRBV15_12	0.034	-0.118	0.001	0.040	-0.012
TCRBV16_5	0.032	0.045	0.087	0.078	-0.158
TCRBV16_6	0.279	0.137	-0.370	-0.104	-0.016
TCRBV16_7	0.533	0.447	0.849	0.863	-0.185
TCRBV16_8	0.124	-0.748	0.162	0.512	0.171
TCRBV16_9	0.019	0.096	0.247	-0.373	0.093
TCRBV16_10	-0.520	0.806	0.104	0.097	-0.098
TCRBV16_11	-0.206	-0.377	-0.578	0.008	-0.138
TCRBV16_12	0.382	-0.335	0.203	-0.129	-0.135
TCRBV16_13	-0.032	0.035	0.075	-0.014	0.058
TCRBV18_3	-0.016	0.019	0.005	0.037	-0.004
TCRBV18_4	0.166	-0.041	-0.161	0.006	0.086
TCRBV18_5	0.042	0.049	-0.283	0.054	-0.104
TCRBV18_6	-0.342	0.136	0.214	-0.084	0.116
TCRBV18_7	0.363	0.560	-0.685	0.208	-0.378
TCRBV18_8	0.556	-0.420	-0.280	0.138	0.096
TCRBV18_9	0.074	0.325	-0.210	-0.176	0.642
TCRBV18_10	0.067	0.190	0.193	-0.374	-0.180
TCRBV18_11	0.203	0.020	0.194	0.040	0.013
TCRBV18_12	-0.044	-0.012	0.018	-0.008	0.021
TCRBV18_13	0.050	0.015	-0.020	-0.130	-0.089
TCRBV20_5	0.033	-0.102	0.037	-0.094	-0.069
TCRBV20_6	0.225	-0.285	0.058	0.011	0.039
TCRBV20_7	0.344	0.159	-0.436	-0.026	-0.330
TCRBV20_8	0.169	0.122	0.067	0.256	-0.097
TCRBV20_9	-0.934	-0.037	0.056	0.166	0.213
TCRBV20_10	0.279	-0.185	0.293	0.184	0.632
TCRBV20_11	0.255	0.298	-0.618	-0.325	-0.141
TCRBV20_12	0.142	-0.008	0.462	-0.528	-0.231
TCRBV20_13	0.340	0.000	0.222	0.169	0.014
TCRBV20_14	-0.172	-0.004	0.002	-0.013	0.008

	41	42	43	44	45
TCRBV01_6	-0.008	0.039	-0.042	0.005	0.023
TCRBV01_7	0.197	-0.173	-0.288	-0.100	0.008
TCRBV01_8	-0.123	-0.454	-0.154	0.432	-0.048
TCRBV01_9	0.205	0.140	0.123	-0.455	-0.171
TCRBV01_10	-0.222	0.160	0.276	0.222	-0.278
TCRBV01_11	0.292	0.071	-0.028	-0.375	-0.078
TCRBV01_12	0.009	0.185	-0.003	0.069	0.396
TCRBV01_13	-0.005	0.081	0.081	0.041	0.088
TCRBV01_14	0.006	0.002	0.009	-0.005	-0.011
TCRBV02_6	0.159	-0.260	0.187	0.004	-0.005
TCRBV02_7	-0.029	-0.161	0.034	-0.273	0.034

FIG. 104D

TCRBV02_8	0.098	0.433	-0.381	-0.098	-0.198
TCRBV02_9	0.017	-0.018	-0.018	0.194	0.098
TCRBV02_10	-0.038	-0.227	-0.027	0.011	0.026
TCRBV02_11	-0.001	-0.113	0.216	-0.118	-0.331
TCRBV02_12	0.279	0.095	-0.413	0.015	-0.080
TCRBV02_13	0.009	-0.116	-0.020	0.002	-0.104
TCRBV03_4	-0.013	0.010	0.011	0.007	0.015
TCRBV03_5	-0.025	0.015	0.007	-0.000	0.021
TCRBV03_6	0.163	-0.116	0.344	0.213	0.048
TCRBV03_7	0.277	-0.285	0.433	-0.356	0.058
TCRBV03_8	0.020	0.170	0.149	0.194	-0.044
TCRBV03_9	-0.284	-0.207	-0.179	0.022	-0.169
TCRBV03_10	0.231	0.089	-0.083	-0.048	0.072
TCRBV03_11	-0.214	0.379	-0.361	0.063	0.208
TCRBV03_12	-0.092	0.246	-0.180	-0.006	0.055
TCRBV03_13	0.288	-0.249	-0.168	-0.257	-0.334
TCRBV04_6	0.038	0.039	0.030	0.011	-0.075
TCRBV04_7	0.113	0.046	0.327	0.131	-0.024
TCRBV04_8	-0.059	0.336	-0.189	-0.099	0.100
TCRBV04_9	-0.006	0.348	0.031	0.458	-0.568
TCRBV04_10	-0.236	-0.019	-0.190	-0.179	0.643
TCRBV04_11	0.036	-0.557	0.245	-0.224	0.077
TCRBV04_12	-0.063	-0.095	-0.046	-0.262	0.033
TCRBV04_13	0.168	-0.099	-0.476	-0.189	-0.186
TCRBV04_14	0.059	-0.057	0.263	0.273	0.237
TCRBV04_15	-0.051	0.058	0.006	0.080	-0.237
TCRBV051_5	-0.202	0.112	0.218	-0.148	0.224
TCRBV051_6	-0.272	0.191	0.410	0.223	0.201
TCRBV051_7	-0.589	0.082	-0.136	0.391	-0.233
TCRBV051_8	-0.226	-0.202	0.059	-0.229	0.035
TCRBV051_9	0.068	-0.366	-0.325	0.095	-0.026
TCRBV051_10	0.580	0.088	0.057	-0.052	0.363
TCRBV051_11	0.718	-0.212	0.094	0.380	-0.065
TCRBV051_12	-0.600	0.238	-0.455	-0.313	-0.668
TCRBV051_13	-0.129	0.131	0.449	-0.251	0.164
TCRBV052_6	-0.069	-0.250	0.178	0.176	0.189
TCRBV052_7	-0.213	-0.079	-0.016	0.265	-0.368
TCRBV052_8	0.031	-0.282	0.204	0.158	-0.025
TCRBV052_9	0.175	0.376	0.240	-0.103	-0.355
TCRBV052_10	-0.583	-0.022	-0.262	-0.122	0.219
TCRBV052_11	0.170	0.078	-0.119	-0.164	0.276
TCRBV052_12	-0.180	0.132	0.070	-0.126	0.171
TCRBV052_13	0.016	0.109	0.076	0.011	-0.115
TCRBV06_5	0.174	-0.151	0.083	-0.049	0.025
TCRBV06_6	0.094	-0.099	-0.076	0.013	0.039
TCRBV06_7	0.192	0.040	-0.085	-0.116	-0.009
TCRBV06_8	0.036	0.121	-0.408	0.239	-0.035
TCRBV06_9	-0.167	-0.409	-0.408	-0.232	0.120
TCRBV06_10	0.032	-0.135	0.658	0.044	-0.392
TCRBV06_11	-0.117	0.385	0.348	-0.226	0.272
TCRBV06_12	0.089	0.248	-0.207	0.171	-0.021
TCRBV06_13	0.017	0.053	0.068	-0.011	-0.069
TCRBV07_5	-0.068	-0.069	0.020	0.062	0.073
TCRBV07_6	0.427	-0.064	-0.079	0.085	-0.177
TCRBV07_7	0.106	-0.006	-0.073	0.320	-0.007
TCRBV07_8	-0.111	-0.269	0.015	-0.227	0.231
TCRBV07_9	-0.042	-0.044	-0.094	0.044	-0.036
TCRBV07_10	0.093	0.084	0.100	-0.267	0.144
TCRBV07_11	0.005	0.261	0.149	-0.273	-0.037
TCRBV07_12	-0.064	0.155	-0.043	0.106	-0.269
TCRBV07_13	0.003	0.004	-0.022	-0.016	0.006
TCRBV081_5	-0.100	0.036	0.021	0.059	0.115
TCRBV081_6	-0.302	0.097	0.210	0.221	-0.070

FIG. 105A

TCRBV081_7	0.143	-0.256	-0.154	-0.257	-0.003
TCRBV081_8	-0.533	-0.017	-0.247	-0.523	-0.273
TCRBV081_9	0.409	0.125	0.085	0.383	-0.059
TCRBV081_10	0.115	0.107	-0.021	-0.005	0.059
TCRBV081_11	0.243	-0.014	-0.008	-0.052	0.018
TCRBV081_12	0.025	-0.079	0.115	0.174	0.214
TCRBV082_4	0.110	-0.106	0.144	0.055	-0.096
TCRBV082_5	-0.022	0.044	-0.125	0.093	0.141
TCRBV082_6	-0.118	0.014	0.008	-0.056	-0.152
TCRBV082_7	-0.034	0.002	-0.023	-0.636	-0.279
TCRBV082_8	-0.063	0.012	0.261	-0.039	-0.620
TCRBV082_9	-0.102	0.047	-0.351	0.347	0.384
TCRBV082_10	0.117	0.141	0.145	0.282	0.165
TCRBV082_11	0.112	-0.154	-0.059	-0.046	0.457
TCRBV083_4	0.023	-0.019	-0.009	-0.021	-0.023
TCRBV083_5	0.163	0.419	-0.137	0.090	0.115
TCRBV083_6	-0.142	-0.047	-0.115	0.011	0.004
TCRBV083_7	-0.047	0.053	-0.296	0.103	-0.167
TCRBV083_8	-0.111	-0.343	0.287	-0.127	0.027
TCRBV083_9	-0.283	-0.019	0.264	-0.232	0.001
TCRBV083_10	-0.006	-0.262	0.311	-0.107	-0.084
TCRBV083_11	-0.054	-0.017	-0.129	0.166	0.022
TCRBV083_12	0.458	0.236	-0.177	0.119	0.106
TCRBV09_5	0.020	0.005	0.017	0.033	-0.002
TCRBV09_6	0.115	0.109	-0.169	0.327	0.114
TCRBV09_7	0.493	-0.420	-0.372	-0.495	-0.386
TCRBV09_8	0.001	-0.052	-0.212	0.141	-0.020
TCRBV09_9	0.354	-0.147	0.150	0.403	0.036
TCRBV09_10	0.607	0.764	-0.523	-0.397	0.146
TCRBV09_11	0.069	-0.288	-0.111	-0.116	0.190
TCRBV09_12	-0.530	-0.222	-0.710	0.327	0.054
TCRBV09_13	-0.319	-0.208	0.368	-0.038	0.160
TCRBV09_14	-0.359	0.005	0.259	-0.212	0.051
TCRBV09_15	-0.120	-0.069	0.103	-0.017	-0.028
TCRBV10_6	-0.139	-0.231	-0.013	0.171	0.090
TCRBV10_7	-0.343	0.337	0.297	-0.138	0.132
TCRBV10_8	-0.370	0.224	0.140	-0.305	-0.050
TCRBV10_9	-0.126	-0.257	-0.157	-0.083	0.190
TCRBV10_10	0.801	-0.238	-0.261	0.001	-0.263
TCRBV10_11	0.076	0.272	0.089	0.333	0.093
TCRBV10_12	0.107	-0.112	-0.101	0.018	-0.199
TCRBV10_13	-0.006	0.005	0.005	0.003	0.007
TCRBV11_5	0.053	0.005	0.119	0.105	-0.081
TCRBV11_6	-0.048	-0.165	0.128	-0.257	0.144
TCRBV11_7	-0.054	0.190	0.134	0.111	0.170
TCRBV11_8	-0.048	-0.193	0.169	0.081	0.239
TCRBV11_9	-0.048	0.054	-0.369	-0.042	0.034
TCRBV11_10	-0.024	0.281	-0.112	0.043	0.008
TCRBV11_11	0.254	-0.011	0.052	0.019	-0.155
TCRBV11_12	0.259	-0.033	-0.127	-0.200	-0.398
TCRBV11_13	0.044	-0.105	-0.055	-0.048	-0.073
TCRBV11_14	-0.028	0.021	0.024	0.015	0.032
TCRBV11_15	-0.010	0.008	0.009	0.006	0.012
TCRBV12_4	0.141	0.044	0.018	-0.126	0.033
TCRBV12_5	0.228	0.066	-0.140	-0.056	-0.050
TCRBV12_6	-0.108	-0.114	0.092	-0.231	0.140
TCRBV12_7	-0.251	-0.173	0.523	0.142	-0.265
TCRBV12_8	0.090	-0.242	-0.180	0.239	0.181
TCRBV12_9	-0.192	0.101	-0.204	-0.012	-0.061
TCRBV12_10	0.400	0.009	0.024	-0.023	-0.104
TCRBV12_11	-0.153	0.144	-0.023	-0.018	0.077
TCRBV12_12	-0.155	0.165	-0.110	0.084	0.048
TCRBV13_5	0.015	0.084	0.027	-0.118	0.011
TCRBV13_6	0.168	-0.328	0.359	0.024	-0.082

FIG. 105B

TCRBV13_7	0.092	-0.328	-0.345	0.286	-0.170
TCRBV13_8	-0.340	0.461	-0.080	-0.091	-0.058
TCRBV13_9	0.075	0.131	-0.278	0.089	0.201
TCRBV13_10	0.529	0.005	0.015	-0.308	-0.069
TCRBV13_11	-0.316	0.032	0.076	0.260	-0.063
TCRBV13_12	-0.032	-0.099	0.102	-0.062	0.020
TCRBV13_13	-0.189	0.042	0.125	-0.080	0.210
TCRBV14_5	-0.065	0.052	-0.071	0.051	-0.018
TCRBV14_6	0.148	-0.051	0.148	0.037	-0.207
TCRBV14_7	0.080	-0.167	-0.558	0.251	0.071
TCRBV14_8	0.176	0.100	0.338	-0.368	0.018
TCRBV14_9	-0.044	-0.026	0.142	-0.020	0.090
TCRBV14_10	-0.334	0.092	0.208	-0.122	0.162
TCRBV14_11	0.180	0.128	0.006	0.205	-0.054
TCRBV14_12	-0.145	-0.134	-0.214	-0.037	-0.069
TCRBV14_13	0.004	0.005	0.000	0.002	0.009
TCRBV15_4	0.033	-0.124	-0.041	-0.048	-0.104
TCRBV15_5	0.353	0.060	0.107	0.027	0.241
TCRBV15_6	-0.072	-0.117	0.075	-0.346	-0.236
TCRBV15_7	-0.234	-0.026	-0.080	-0.036	-0.307
TCRBV15_8	0.241	0.311	-0.025	0.026	0.377
TCRBV15_9	-0.335	-0.005	0.067	-0.097	-0.079
TCRBV15_10	-0.114	-0.104	0.116	0.456	0.038
TCRBV15_11	0.516	0.032	-0.164	-0.179	0.018
TCRBV15_12	-0.037	0.024	-0.082	0.029	-0.018
TCRBV16_5	0.084	0.060	0.099	-0.039	0.136
TCRBV16_6	0.165	0.342	0.304	-0.148	0.209
TCRBV16_7	0.006	0.583	0.143	0.354	-0.294
TCRBV16_8	0.301	-0.713	-0.273	-0.172	0.245
TCRBV16_9	0.254	0.293	0.173	0.137	-0.117
TCRBV16_10	-0.768	-0.458	-0.242	-0.033	-0.102
TCRBV16_11	-0.199	-0.411	0.120	0.305	-0.053
TCRBV16_12	-0.119	0.380	0.015	-0.471	-0.175
TCRBV16_13	-0.026	0.037	0.006	-0.004	0.076
TCRBV18_3	0.023	-0.030	-0.046	-0.036	-0.003
TCRBV18_4	0.163	0.191	-0.073	0.092	-0.110
TCRBV18_5	0.169	0.430	0.267	0.210	-0.288
TCRBV18_6	0.197	0.469	0.390	0.074	0.354
TCRBV18_7	0.075	-0.252	0.085	-0.360	0.329
TCRBV18_8	-0.609	-0.192	-0.038	0.136	-0.541
TCRBV18_9	0.286	-0.175	0.130	0.129	0.338
TCRBV18_10	0.634	0.322	-0.199	-0.376	-0.065
TCRBV18_11	-0.021	0.335	-0.248	0.157	-0.256
TCRBV18_12	0.009	0.003	-0.028	-0.007	0.056
TCRBV18_13	-0.078	0.023	0.007	0.026	0.080
TCRBV20_5	0.135	0.039	0.111	0.058	-0.109
TCRBV20_6	0.572	-0.241	-0.132	0.512	-0.225
TCRBV20_7	0.259	0.389	0.205	-0.235	-0.309
TCRBV20_8	-0.568	0.514	-0.402	-0.123	0.668
TCRBV20_9	0.190	-0.622	0.318	0.083	0.232
TCRBV20_10	-0.154	0.268	-0.126	0.243	0.034
TCRBV20_11	-0.080	0.205	0.361	-0.047	-0.257
TCRBV20_12	-0.106	-0.227	-0.099	-0.595	-0.096
TCRBV20_13	0.075	-0.173	-0.230	-0.025	0.075
TCRBV20_14	0.026	-0.100	-0.033	-0.039	-0.084

	46	47	48	49	50
TCRBV01_6	-0.094	-0.019	-0.109	-0.013	-0.073
TCRBV01_7	0.014	0.212	-0.055	-0.017	0.014
TCRBV01_8	0.056	0.090	-0.072	0.048	0.034
TCRBV01_9	0.068	-0.044	0.100	-0.198	-0.050
TCRBV01_10	-0.258	0.237	-0.029	-0.367	-0.009
TCRBV01_11	-0.110	-0.140	0.044	0.336	0.034

FIG. 105C

TCRBV01_12	0.159	0.002	-0.125	0.152	-0.053
TCRBV01_13	0.102	-0.126	0.078	0.066	0.002
TCRBV01_14	-0.007	0.009	0.004	0.001	-0.001
TCRBV02_6	-0.031	0.204	-0.019	-0.316	0.276
TCRBV02_7	0.109	-0.019	-0.011	-0.097	0.167
TCRBV02_8	0.281	-0.141	0.150	0.408	-0.069
TCRBV02_9	-0.286	0.030	-0.174	0.038	-0.303
TCRBV02_10	0.192	-0.164	-0.161	-0.066	-0.093
TCRBV02_11	-0.338	-0.040	-0.252	-0.136	-0.029
TCRBV02_12	0.021	-0.169	0.204	-0.042	-0.002
TCRBV02_13	0.026	0.060	-0.059	-0.005	-0.002
TCRBV03_4	0.001	0.006	0.008	0.006	0.001
TCRBV03_5	-0.069	0.006	0.005	-0.009	-0.004
TCRBV03_6	0.100	0.046	-0.447	0.194	-0.271
TCRBV03_7	-0.060	-0.022	0.007	-0.122	-0.055
TCRBV03_8	-0.143	-0.036	-0.064	0.035	0.103
TCRBV03_9	-0.020	0.009	0.023	-0.056	0.289
TCRBV03_10	0.297	0.246	0.266	-0.166	-0.115
TCRBV03_11	-0.196	0.167	0.157	0.091	0.038
TCRBV03_12	0.065	-0.072	-0.010	0.084	0.105
TCRBV03_13	-0.045	-0.128	-0.110	-0.047	-0.194
TCRBV04_6	0.082	0.035	0.012	0.007	-0.039
TCRBV04_7	0.008	0.259	0.142	-0.115	0.027
TCRBV04_8	0.162	0.092	-0.010	0.131	0.000
TCRBV04_9	0.114	-0.324	0.036	-0.122	0.068
TCRBV04_10	0.366	0.090	-0.088	-0.049	0.112
TCRBV04_11	-0.055	-0.161	-0.064	0.022	-0.144
TCRBV04_12	-0.139	-0.093	-0.181	0.428	0.080
TCRBV04_13	-0.510	0.153	0.132	-0.270	0.035
TCRBV04_14	0.009	0.119	0.039	0.045	-0.258
TCRBV04_15	-0.036	-0.169	-0.018	-0.078	0.118
TCRBV051_5	-0.142	-0.230	-0.047	0.164	0.051
TCRBV051_6	0.031	0.039	-0.233	-0.315	0.022
TCRBV051_7	-0.317	-0.028	0.328	0.079	-0.235
TCRBV051_8	-0.036	0.029	0.394	0.013	-0.065
TCRBV051_9	0.313	-0.371	-0.116	0.090	0.029
TCRBV051_10	-0.400	0.166	0.043	-0.051	0.027
TCRBV051_11	-0.185	-0.056	-0.146	-0.120	0.158
TCRBV051_12	0.242	0.176	-0.147	0.103	0.190
TCRBV051_13	0.148	-0.206	-0.092	0.100	0.089
TCRBV052_6	0.117	-0.030	0.065	-0.251	-0.007
TCRBV052_7	-0.120	-0.137	0.255	0.094	0.104
TCRBV052_8	0.042	0.040	-0.246	0.084	-0.036
TCRBV052_9	-0.258	0.016	-0.169	0.018	0.166
TCRBV052_10	-0.054	-0.203	0.129	-0.267	-0.060
TCRBV052_11	-0.208	-0.155	-0.089	0.201	-0.094
TCRBV052_12	0.004	-0.018	0.034	0.156	0.243
TCRBV052_13	0.132	0.005	0.005	0.030	-0.049
TCRBV06_5	0.057	0.041	-0.017	-0.034	-0.080
TCRBV06_6	0.040	0.038	-0.146	-0.090	0.022
TCRBV06_7	0.290	0.121	0.013	0.064	0.088
TCRBV06_8	-0.119	-0.038	0.030	0.013	0.001
TCRBV06_9	0.051	-0.117	-0.103	0.113	0.131
TCRBV06_10	0.353	-0.158	0.200	0.057	-0.100
TCRBV06_11	-0.067	0.067	-0.146	-0.070	0.135
TCRBV06_12	-0.561	0.259	-0.113	-0.092	-0.072
TCRBV06_13	-0.114	0.006	0.117	0.047	-0.228
TCRBV07_5	-0.003	-0.030	0.077	0.092	-0.148
TCRBV07_6	0.045	0.184	0.000	0.076	-0.069
TCRBV07_7	-0.081	0.100	-0.038	-0.276	-0.058
TCRBV07_8	0.334	-0.083	0.141	-0.182	0.238
TCRBV07_9	-0.152	0.034	-0.184	0.371	-0.039
TCRBV07_10	-0.005	-0.047	-0.242	-0.022	0.043

FIG. 105D

TCRBV07_11	-0.100	0.018	0.005	-0.117	0.116
TCRBV07_12	-0.004	0.032	0.085	0.095	-0.168
TCRBV07_13	-0.106	0.012	-0.007	-0.028	-0.017
TCRBV081_5	-0.041	-0.089	-0.063	-0.025	0.020
TCRBV081_6	-0.119	-0.006	0.061	-0.235	-0.281
TCRBV081_7	-0.140	-0.080	-0.004	0.018	0.024
TCRBV081_8	0.159	-0.219	-0.120	-0.007	0.048
TCRBV081_9	0.093	0.200	-0.247	0.106	0.147
TCRBV081_10	-0.136	-0.137	-0.111	0.069	0.097
TCRBV081_11	0.025	0.236	0.104	0.098	0.072
TCRBV081_12	0.158	0.096	0.380	-0.025	-0.127
TCRBV082_4	-0.060	-0.361	0.341	0.085	-0.004
TCRBV082_5	-0.219	0.128	0.042	-0.060	0.123
TCRBV082_6	-0.085	-0.150	0.327	0.075	0.364
TCRBV082_7	-0.219	0.150	-0.305	-0.219	-0.305
TCRBV082_8	-0.195	-0.015	-0.194	0.263	-0.147
TCRBV082_9	0.371	0.014	-0.077	-0.062	-0.018
TCRBV082_10	0.190	0.173	-0.157	-0.194	-0.050
TCRBV082_11	0.217	0.062	0.022	0.112	0.037
TCRBV083_4	-0.002	-0.009	-0.010	-0.004	-0.019
TCRBV083_5	0.042	0.073	0.324	0.204	0.112
TCRBV083_6	-0.154	-0.021	0.041	0.021	0.276
TCRBV083_7	-0.065	-0.154	-0.219	-0.027	-0.135
TCRBV083_8	-0.077	0.033	0.189	-0.171	0.023
TCRBV083_9	-0.103	0.037	-0.096	0.040	-0.201
TCRBV083_10	0.231	-0.167	0.210	-0.153	-0.144
TCRBV083_11	0.083	-0.156	-0.167	-0.175	0.197
TCRBV083_12	0.045	0.364	-0.272	0.265	-0.109
TCRBV09_5	0.066	0.031	-0.028	0.002	-0.018
TCRBV09_6	0.294	-0.010	-0.068	-0.224	0.112
TCRBV09_7	0.362	0.295	-0.238	-0.103	-0.191
TCRBV09_8	-0.228	0.185	-0.183	0.216	0.030
TCRBV09_9	-0.213	-0.273	-0.309	-0.218	0.227
TCRBV09_10	0.033	-0.354	0.222	-0.147	0.034
TCRBV09_11	0.137	-0.168	0.179	-0.043	-0.165
TCRBV09_12	0.027	-0.706	0.063	-0.020	-0.256
TCRBV09_13	-0.170	0.004	-0.032	0.059	-0.019
TCRBV09_14	0.119	0.063	-0.215	0.082	0.118
TCRBV09_15	0.022	0.182	-0.209	0.092	0.044
TCRBV10_6	-0.024	-0.097	0.226	-0.236	-0.050
TCRBV10_7	0.094	0.025	-0.184	-0.020	-0.310
TCRBV10_8	0.261	0.252	0.308	0.122	-0.093
TCRBV10_9	-0.443	0.090	-0.022	0.150	0.356
TCRBV10_10	0.020	-0.452	0.064	-0.243	0.097
TCRBV10_11	-0.026	0.083	-0.245	0.121	-0.043
TCRBV10_12	0.116	0.095	-0.150	0.103	0.043
TCRBV10_13	0.000	0.003	0.004	0.003	0.001
TCRBV11_5	-0.032	0.031	0.073	-0.073	-0.188
TCRBV11_6	0.014	-0.101	0.013	-0.160	-0.153
TCRBV11_7	0.026	-0.095	0.063	0.013	-0.193
TCRBV11_8	0.154	-0.046	0.049	0.026	0.307
TCRBV11_9	0.176	0.062	-0.284	0.256	-0.062
TCRBV11_10	-0.308	0.023	-0.191	-0.155	0.118
TCRBV11_11	-0.248	0.330	0.097	0.155	0.157
TCRBV11_12	0.140	-0.124	-0.002	-0.078	-0.102
TCRBV11_13	0.004	0.123	-0.006	0.007	0.009
TCRBV11_14	0.001	0.014	0.018	0.012	0.003
TCRBV11_15	0.001	0.005	0.007	0.005	0.001
TCRBV12_4	-0.075	0.100	0.066	0.006	0.094
TCRBV12_5	0.233	0.034	0.101	0.012	0.035
TCRBV12_6	0.107	0.038	-0.088	0.073	0.026
TCRBV12_7	-0.081	0.088	0.119	0.191	-0.084
TCRBV12_8	-0.003	0.093	0.350	0.278	0.005
TCRBV12_9	0.107	0.007	-0.488	0.051	-0.149

FIG. 106A

TCRBV12_10	-0.016	0.048	0.237	-0.142	0.207
TCRBV12_11	-0.090	-0.388	-0.127	-0.193	0.108
TCRBV12_12	-0.183	-0.019	-0.171	-0.275	-0.243
TCRBV13_5	0.044	-0.033	0.014	0.017	-0.012
TCRBV13_6	-0.271	-0.059	0.035	0.203	0.209
TCRBV13_7	-0.030	0.250	0.077	-0.161	-0.196
TCRBV13_8	-0.160	0.156	0.398	0.084	-0.160
TCRBV13_9	0.137	0.118	0.070	0.023	0.158
TCRBV13_10	0.164	-0.032	-0.287	-0.074	-0.152
TCRBV13_11	0.127	-0.228	-0.211	0.086	0.066
TCRBV13_12	0.009	-0.035	-0.054	0.065	0.008
TCRBV13_13	-0.020	-0.136	-0.042	-0.243	0.078
TCRBV14_5	0.004	-0.033	-0.009	0.002	0.036
TCRBV14_6	0.185	-0.045	0.216	0.046	-0.146
TCRBV14_7	-0.272	0.160	-0.134	-0.059	0.053
TCRBV14_8	-0.308	0.053	0.100	-0.057	0.089
TCRBV14_9	0.054	-0.639	-0.201	-0.271	0.040
TCRBV14_10	-0.316	0.026	-0.028	0.343	-0.065
TCRBV14_11	0.564	0.282	0.078	0.100	-0.028
TCRBV14_12	0.084	0.183	-0.028	-0.108	0.024
TCRBV14_13	0.006	0.012	0.005	0.002	-0.004
TCRBV15_4	0.018	0.085	-0.051	-0.025	0.026
TCRBV15_5	-0.042	-0.167	-0.165	-0.102	-0.247
TCRBV15_6	-0.059	0.224	-0.017	0.096	-0.169
TCRBV15_7	0.054	0.265	-0.259	-0.083	0.285
TCRBV15_8	-0.097	0.013	0.078	0.146	-0.113
TCRBV15_9	-0.133	-0.227	0.184	0.039	0.053
TCRBV15_10	0.068	-0.079	0.066	0.147	0.153
TCRBV15_11	0.274	0.090	-0.031	-0.191	-0.183
TCRBV15_12	-0.155	0.018	0.031	-0.020	0.091
TCRBV16_5	0.036	0.104	0.034	-0.229	0.176
TCRBV16_6	0.142	-0.036	0.005	0.102	0.301
TCRBV16_7	-0.134	-0.585	-0.273	0.005	-0.060
TCRBV16_8	-0.189	0.060	0.007	0.025	-0.232
TCRBV16_9	-0.051	0.020	0.006	0.007	0.051
TCRBV16_10	-0.131	0.268	-0.036	0.047	-0.116
TCRBV16_11	-0.172	0.251	0.222	-0.016	-0.005
TCRBV16_12	0.037	-0.280	-0.150	0.103	-0.017
TCRBV16_13	0.044	-0.063	0.005	0.029	0.065
TCRBV18_3	0.029	-0.042	0.002	-0.023	-0.023
TCRBV18_4	0.318	-0.139	0.208	-0.178	0.000
TCRBV18_5	0.329	-0.013	-0.063	0.201	0.163
TCRBV18_6	0.299	0.392	0.038	-0.194	-0.116
TCRBV18_7	-0.813	-0.105	0.141	0.029	-0.013
TCRBV18_8	0.313	0.305	0.063	-0.275	0.014
TCRBV18_9	-0.229	-0.283	0.005	0.047	-0.084
TCRBV18_10	-0.205	-0.198	0.318	0.048	-0.313
TCRBV18_11	-0.155	-0.036	0.150	0.090	-0.068
TCRBV18_12	-0.013	0.008	0.008	-0.003	0.035
TCRBV18_13	-0.057	-0.076	-0.031	-0.018	0.022
TCRBV20_5	0.001	0.172	0.110	-0.027	-0.213
TCRBV20_6	-0.161	0.200	0.001	0.219	0.053
TCRBV20_7	-0.277	0.053	0.085	-0.109	0.113
TCRBV20_8	-0.077	0.280	-0.130	-0.204	-0.219
TCRBV20_9	0.312	-0.332	0.028	0.436	-0.109
TCRBV20_10	-0.214	-0.152	-0.028	-0.169	0.013
TCRBV20_11	0.151	-0.090	0.053	-0.048	-0.151
TCRBV20_12	0.152	0.226	-0.058	-0.109	0.329
TCRBV20_13	0.027	-0.203	-0.184	0.039	0.059
TCRBV20_14	0.015	0.069	-0.041	-0.020	0.021

	51	52
TCRBV01_6	0.016	0.001

FIG. 106B

TCRBV01_7	-0.020	-0.075
TCRBV01_8	-0.138	0.225
TCRBV01_9	-0.111	-0.177
TCRBV01_10	0.077	0.009
TCRBV01_11	-0.103	-0.006
TCRBV01_12	0.204	-0.057
TCRBV01_13	0.045	0.035
TCRBV01_14	-0.004	-0.002
TCRBV02_6	0.155	-0.115
TCRBV02_7	-0.123	-0.062
TCRBV02_8	-0.486	0.108
TCRBV02_9	0.044	0.010
TCRBV02_10	-0.018	-0.073
TCRBV02_11	-0.030	-0.039
TCRBV02_12	-0.053	-0.132
TCRBV02_13	0.004	-0.038
TCRBV03_4	0.013	0.009
TCRBV03_5	-0.013	0.017
TCRBV03_6	-0.052	-0.094
TCRBV03_7	0.096	-0.156
TCRBV03_8	0.103	0.047
TCRBV03_9	0.047	0.087
TCRBV03_10	-0.035	-0.112
TCRBV03_11	-0.110	0.052
TCRBV03_12	-0.035	-0.024
TCRBV03_13	-0.046	0.128
TCRBV04_6	-0.036	0.015
TCRBV04_7	-0.061	-0.174
TCRBV04_8	0.157	-0.086
TCRBV04_9	-0.013	-0.501
TCRBV04_10	-0.157	0.379
TCRBV04_11	0.170	0.114
TCRBV04_12	-0.081	0.102
TCRBV04_13	-0.178	0.053
TCRBV04_14	0.221	0.006
TCRBV04_15	-0.022	0.093
TCRBV051_5	-0.218	-0.117
TCRBV051_6	-0.130	-0.082
TCRBV051_7	-0.092	-0.197
TCRBV051_8	-0.016	0.098
TCRBV051_9	0.115	0.071
TCRBV051_10	-0.193	0.118
TCRBV051_11	0.184	0.174
TCRBV051_12	0.140	-0.014
TCRBV051_13	0.193	0.064
TCRBV052_6	-0.046	-0.243
TCRBV052_7	0.062	0.085
TCRBV052_8	0.001	0.106
TCRBV052_9	0.140	0.107
TCRBV052_10	0.067	0.130
TCRBV052_11	-0.041	-0.072
TCRBV052_12	-0.120	-0.036
TCRBV052_13	-0.079	0.038
TCRBV06_5	-0.084	-0.030
TCRBV06_6	-0.046	-0.081
TCRBV06_7	-0.200	-0.093
TCRBV06_8	0.281	0.003
TCRBV06_9	-0.182	-0.116
TCRBV06_10	0.037	0.149
TCRBV06_11	0.050	-0.020
TCRBV06_12	-0.010	0.049
TCRBV06_13	0.121	0.093
TCRBV07_5	0.004	-0.075
TCRBV07_6	0.025	-0.118

FIG. 106C

TCRBV07_7	-0.084	-0.014
TCRBV07_8	0.078	0.105
TCRBV07_9	-0.127	-0.129
TCRBV07_10	0.244	0.127
TCRBV07_11	-0.027	0.159
TCRBV07_12	-0.098	-0.110
TCRBV07_13	-0.048	0.008
TCRBV081_5	0.068	0.013
TCRBV081_6	-0.048	0.102
TCRBV081_7	0.022	0.081
TCRBV081_8	-0.095	-0.081
TCRBV081_9	-0.026	-0.092
TCRBV081_10	0.012	0.096
TCRBV081_11	-0.043	0.029
TCRBV081_12	0.110	-0.148
TCRBV082_4	0.344	-0.050
TCRBV082_5	-0.179	-0.047
TCRBV082_6	0.337	-0.016
TCRBV082_7	-0.287	0.254
TCRBV082_8	0.044	-0.045
TCRBV082_9	-0.169	0.056
TCRBV082_10	-0.109	-0.130
TCRBV082_11	0.020	-0.021
TCRBV083_4	-0.003	0.009
TCRBV083_5	-0.066	-0.001
TCRBV083_6	-0.157	-0.003
TCRBV083_7	0.199	0.101
TCRBV083_8	-0.327	0.003
TCRBV083_9	0.173	0.032
TCRBV083_10	0.206	-0.042
TCRBV083_11	-0.173	0.039
TCRBV083_12	0.148	-0.139
TCRBV09_5	0.036	0.008
TCRBV09_6	0.075	0.122
TCRBV09_7	-0.183	0.216
TCRBV09_8	0.168	-0.023
TCRBV09_9	0.002	-0.075
TCRBV09_10	0.084	-0.016
TCRBV09_11	0.143	0.010
TCRBV09_12	0.013	-0.297
TCRBV09_13	-0.277	-0.142
TCRBV09_14	-0.264	0.022
TCRBV09_15	-0.030	-0.055
TCRBV10_6	-0.015	-0.051
TCRBV10_7	-0.087	-0.026
TCRBV10_8	0.007	-0.177
TCRBV10_9	0.026	0.096
TCRBV10_10	-0.149	0.220
TCRBV10_11	0.094	-0.065
TCRBV10_12	0.117	-0.002
TCRBV10_13	0.006	0.004
TCRBV11_5	0.041	0.053
TCRBV11_6	0.108	0.035
TCRBV11_7	-0.150	0.218
TCRBV11_8	-0.292	-0.158
TCRBV11_9	0.194	-0.136
TCRBV11_10	-0.113	0.030
TCRBV11_11	0.093	-0.169
TCRBV11_12	0.019	0.053
TCRBV11_13	0.026	-0.000
TCRBV11_14	0.029	0.019
TCRBV11_15	0.011	0.007
TCRBV12_4	-0.159	-0.079

FIG. 106D

TCRBV12_5	0.077	0.128
TCRBV12_6	-0.113	-0.017
TCRBV12_7	-0.022	0.280
TCRBV12_8	0.151	0.020
TCRBV12_9	0.132	-0.241
TCRBV12_10	0.001	-0.051
TCRBV12_11	-0.136	-0.088
TCRBV12_12	0.069	0.049
TCRBV13_5	0.074	-0.037
TCRBV13_6	-0.307	-0.069
TCRBV13_7	0.086	-0.060
TCRBV13_8	-0.001	0.140
TCRBV13_9	0.061	-0.077
TCRBV13_10	0.175	-0.011
TCRBV13_11	0.064	0.225
TCRBV13_12	0.014	0.036
TCRBV13_13	-0.165	-0.147
TCRBV14_5	-0.002	0.019
TCRBV14_6	-0.189	-0.020
TCRBV14_7	0.083	-0.062
TCRBV14_8	0.103	-0.023
TCRBV14_9	0.028	0.026
TCRBV14_10	0.080	-0.040
TCRBV14_11	-0.259	0.123
TCRBV14_12	0.148	-0.026
TCRBV14_13	0.008	0.003
TCRBV15_4	0.029	-0.052
TCRBV15_5	-0.116	-0.158
TCRBV15_6	-0.006	-0.061
TCRBV15_7	0.240	0.066
TCRBV15_8	0.057	0.031
TCRBV15_9	0.076	0.015
TCRBV15_10	-0.095	0.189
TCRBV15_11	-0.164	-0.094
TCRBV15_12	-0.053	0.018
TCRBV16_5	0.264	0.038
TCRBV16_6	0.025	0.032
TCRBV16_7	-0.235	0.165
TCRBV16_8	-0.007	-0.071
TCRBV16_9	0.099	0.058
TCRBV16_10	-0.263	-0.097
TCRBV16_11	-0.055	0.105
TCRBV16_12	0.113	-0.166
TCRBV16_13	0.008	0.003
TCRBV18_3	0.010	0.022
TCRBV18_4	-0.061	0.036
TCRBV18_5	-0.064	0.023
TCRBV18_6	0.039	-0.065
TCRBV18_7	0.121	-0.108
TCRBV18_8	0.036	-0.001
TCRBV18_9	-0.230	-0.031
TCRBV18_10	-0.010	-0.013
TCRBV18_11	0.078	0.235
TCRBV18_12	0.007	0.001
TCRBV18_13	0.031	0.006
TCRBV20_5	0.092	0.080
TCRBV20_6	-0.210	0.024
TCRBV20_7	-0.208	-0.132
TCRBV20_8	0.075	0.200
TCRBV20_9	0.136	0.064
TCRBV20_10	-0.026	0.105
TCRBV20_11	-0.060	0.007
TCRBV20_12	0.170	-0.154
TCRBV20_13	-0.025	-0.197

FIG. 107A

TCRBV20_14	0.023	-0.042

Variance Explained by Components

1	2	3	4	5
806.097	574.767	525.021	474.758	360.278
6	7	8	9	10
326.711	312.488	234.426	220.247	205.757
11	12	13	14	15
197.164	187.097	166.789	160.829	147.404
16	17	18	19	20
130.104	128.438	120.749	108.967	98.134
21	22	23	24	25
90.690	78.013	76.711	61.271	59.256
26	27	28	29	30
50.362	48.663	39.763	37.130	32.355
31	32	33	34	35
29.161	26.169	24.054	21.550	20.080
36	37	38	39	40
18.509	17.875	15.007	13.936	12.903
41	42	43	44	45
11.317	9.508	8.822	8.187	7.641
46	47	48	49	50
6.640	5.734	4.707	4.103	3.624
51	52			
3.345	2.374			

Percent of Total Variance Explained

1	2	3	4	5
12.723	9.072	8.287	7.493	5.686
6	7	8	9	10
5.157	4.932	3.700	3.476	3.248
11	12	13	14	15
3.112	2.953	2.633	2.538	2.327
16	17	18	19	20

FIG. 107B

2.054	2.027	1.906	1.720	1.549
21	22	23	24	25
1.431	1.231	1.211	0.967	0.935
26	27	28	29	30
0.795	0.768	0.628	0.586	0.511
31	32	33	34	35
0.460	0.413	0.380	0.340	0.317
36	37	38	39	40
0.292	0.282	0.237	0.220	0.204
41	42	43	44	45
0.179	0.150	0.139	0.129	0.121
46	47	48	49	50
0.105	0.090	0.074	0.065	0.057
51	52			
0.053	0.037			

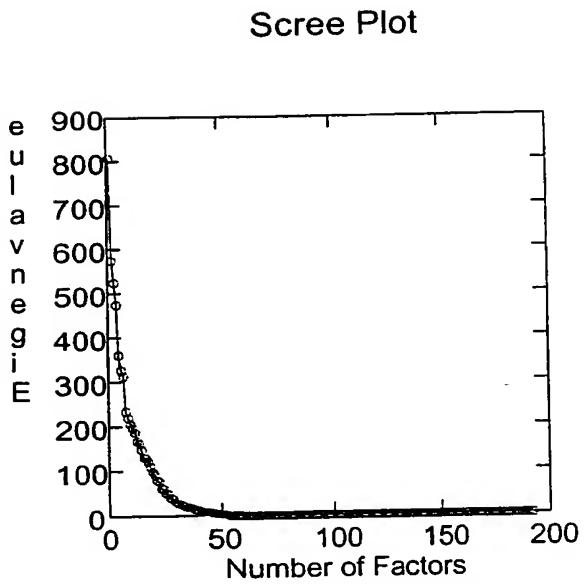


FIG. 107C

Coefficients for Standardized Factor Scores

	1	2	3	4	5
TCRBV01_6	-0.000	-0.000	-0.000	0.000	0.000
TCRBV01_7	0.001	0.001	-0.000	0.000	0.000
TCRBV01_8	-0.003	-0.002	0.008	-0.010	0.007
TCRBV01_9	0.001	0.004	0.003	0.006	0.006
TCRBV01_10	0.004	0.004	0.004	0.003	0.003
TCRBV01_11	0.000	0.005	-0.001	0.003	-0.000
TCRBV01_12	-0.000	0.002	-0.002	0.000	0.001
TCRBV01_13	-0.000	0.000	-0.001	0.000	-0.000
TCRBV01_14	-0.000	0.000	-0.000	0.000	-0.000
TCRBV02_6	0.001	-0.000	-0.001	-0.000	-0.000
TCRBV02_7	0.001	0.001	0.001	-0.000	-0.003
TCRBV02_8	0.000	0.001	0.000	0.000	0.002
TCRBV02_9	0.001	0.000	0.000	0.000	-0.004
TCRBV02_10	-0.000	-0.000	0.001	-0.002	0.002
TCRBV02_11	-0.001	-0.000	0.003	-0.000	0.001
TCRBV02_12	-0.001	-0.000	0.001	-0.000	0.000
TCRBV02_13	-0.000	-0.000	0.000	-0.001	0.001
TCRBV03_4	-0.000	-0.000	-0.000	0.000	0.000
TCRBV03_5	-0.000	-0.000	-0.000	-0.000	0.000
TCRBV03_6	0.003	0.000	-0.001	-0.002	0.000
TCRBV03_7	0.003	0.003	-0.001	-0.002	0.002
TCRBV03_8	0.004	0.004	-0.000	-0.002	0.004
TCRBV03_9	0.005	0.005	-0.003	-0.000	0.005
TCRBV03_10	-0.004	0.001	0.007	-0.002	0.014
TCRBV03_11	-0.006	0.002	0.003	0.004	0.002
TCRBV03_12	-0.001	0.000	0.003	0.002	-0.004
TCRBV03_13	-0.001	-0.001	0.005	0.005	-0.006
TCRBV04_6	0.000	-0.000	-0.000	-0.000	0.000
TCRBV04_7	0.001	-0.000	-0.000	-0.001	0.000
TCRBV04_8	0.002	0.000	0.001	-0.002	0.000
TCRBV04_9	0.006	-0.002	0.001	-0.003	0.000
TCRBV04_10	0.006	-0.001	-0.001	-0.001	0.003
TCRBV04_11	-0.003	0.001	-0.003	0.004	-0.002
TCRBV04_12	-0.005	0.002	-0.001	0.003	0.004
TCRBV04_13	-0.004	0.003	0.001	0.005	-0.007
TCRBV04_14	-0.004	-0.002	0.003	-0.005	0.001
TCRBV04_15	-0.000	0.000	0.000	-0.000	-0.000
TCRBV051_5	0.000	0.000	-0.000	-0.000	0.000
TCRBV051_6	0.000	-0.000	0.000	0.000	0.002
TCRBV051_7	-0.000	-0.001	-0.001	-0.002	0.003
TCRBV051_8	0.007	-0.020	0.014	0.014	0.001
TCRBV051_9	0.000	0.002	-0.003	0.006	-0.005
TCRBV051_10	-0.001	0.009	-0.007	-0.004	-0.004
TCRBV051_11	-0.002	0.005	0.004	-0.013	-0.003
TCRBV051_12	-0.001	0.006	-0.001	-0.002	-0.002
TCRBV051_13	0.000	0.000	-0.000	-0.000	-0.000
TCRBV052_6	0.000	0.001	-0.001	-0.001	-0.000
TCRBV052_7	0.001	0.005	0.000	0.001	-0.002
TCRBV052_8	-0.004	0.010	0.012	0.007	-0.010
TCRBV052_9	0.002	-0.002	0.002	-0.001	0.000
TCRBV052_10	0.002	-0.004	-0.005	-0.002	-0.001
TCRBV052_11	0.001	-0.005	-0.001	-0.004	0.004
TCRBV052_12	0.000	-0.004	-0.002	-0.001	0.000
TCRBV052_13	0.000	-0.001	-0.000	-0.000	-0.001
TCRBV06_5	0.000	0.000	-0.000	-0.000	-0.000
TCRBV06_6	0.001	0.001	-0.001	0.000	0.001
TCRBV06_7	0.003	0.002	0.001	0.000	-0.000
TCRBV06_8	0.003	0.003	0.004	0.001	0.001

FIG. 108A

TCRBV06_9	0.004	0.002	0.005	-0.007	0.006
TCRBV06_10	-0.003	0.004	-0.000	0.002	0.005
TCRBV06_11	-0.004	0.002	0.002	0.004	0.002
TCRBV06_12	-0.002	-0.001	-0.000	0.002	0.002
TCRBV06_13	-0.000	-0.000	-0.000	0.000	0.001
TCRBV07_5	0.000	0.000	-0.000	-0.000	-0.000
TCRBV07_6	0.001	0.000	0.004	0.003	-0.003
TCRBV07_7	0.002	-0.001	0.006	-0.002	-0.002
TCRBV07_8	0.002	0.004	0.001	0.001	0.004
TCRBV07_9	0.006	0.004	0.005	-0.002	0.003
TCRBV07_10	-0.001	0.004	-0.001	0.002	0.008
TCRBV07_11	-0.004	0.001	-0.001	0.000	0.005
TCRBV07_12	-0.002	0.001	-0.001	0.001	0.001
TCRBV07_13	-0.000	-0.000	-0.000	-0.000	0.000
TCRBV081_5	-0.000	-0.000	0.000	0.000	0.000
TCRBV081_6	-0.000	0.001	-0.000	-0.001	0.002
TCRBV081_7	0.001	-0.001	0.000	-0.002	0.006
TCRBV081_8	0.001	-0.000	0.002	0.000	0.002
TCRBV081_9	0.005	-0.008	-0.001	-0.003	-0.001
TCRBV081_10	-0.002	0.002	-0.003	0.005	-0.004
TCRBV081_11	-0.003	0.004	0.001	0.001	-0.003
TCRBV081_12	-0.001	0.002	0.000	-0.001	-0.002
TCRBV082_4	0.001	-0.001	-0.000	-0.002	-0.001
TCRBV082_5	0.002	-0.002	-0.001	-0.005	-0.002
TCRBV082_6	0.002	-0.001	0.000	-0.004	-0.002
TCRBV082_7	0.005	-0.004	0.003	-0.008	-0.008
TCRBV082_8	-0.002	0.002	-0.000	0.004	-0.001
TCRBV082_9	-0.004	0.004	-0.001	0.007	0.008
TCRBV082_10	-0.003	0.001	-0.001	0.006	0.004
TCRBV082_11	-0.001	0.000	0.000	0.002	0.002
TCRBV083_4	-0.000	-0.000	0.000	0.000	-0.000
TCRBV083_5	-0.000	0.000	0.000	-0.000	-0.000
TCRBV083_6	0.001	-0.000	-0.002	-0.001	-0.002
TCRBV083_7	-0.000	-0.001	0.002	-0.001	0.004
TCRBV083_8	0.000	0.002	0.000	-0.002	0.003
TCRBV083_9	0.001	0.000	-0.002	0.000	0.001
TCRBV083_10	-0.001	0.001	-0.000	0.002	-0.000
TCRBV083_11	-0.001	-0.000	0.003	0.002	-0.004
TCRBV083_12	-0.000	-0.001	-0.001	0.001	-0.003
TCRBV09_5	-0.000	-0.000	0.000	0.000	0.000
TCRBV09_6	0.000	-0.000	-0.001	0.000	0.001
TCRBV09_7	0.001	-0.001	-0.000	-0.001	0.006
TCRBV09_8	0.000	-0.002	0.005	0.010	0.012
TCRBV09_9	0.003	-0.001	0.008	0.006	0.008
TCRBV09_10	0.003	0.006	0.001	-0.004	0.010
TCRBV09_11	-0.002	0.005	0.013	-0.008	-0.014
TCRBV09_12	-0.000	0.006	-0.001	-0.003	-0.003
TCRBV09_13	0.000	0.001	-0.000	-0.001	-0.001
TCRBV09_14	0.000	0.000	-0.000	-0.000	-0.000
TCRBV09_15	0.000	-0.000	0.000	-0.000	-0.000
TCRBV10_6	0.001	0.001	-0.000	-0.001	-0.001
TCRBV10_7	0.001	0.003	0.002	0.002	-0.005
TCRBV10_8	0.002	0.003	-0.000	0.001	-0.000
TCRBV10_9	-0.005	-0.003	0.001	-0.004	0.001
TCRBV10_10	-0.001	-0.003	0.000	0.001	0.001
TCRBV10_11	0.002	-0.001	-0.002	0.001	0.003
TCRBV10_12	0.000	-0.000	-0.001	0.000	0.001
TCRBV10_13	-0.000	-0.000	-0.000	0.000	0.000
TCRBV11_5	0.000	-0.000	-0.000	0.000	0.001
TCRBV11_6	0.001	0.001	0.000	-0.002	0.001
TCRBV11_7	0.001	0.002	0.002	0.000	-0.001
TCRBV11_8	0.001	0.003	0.004	-0.003	-0.000
TCRBV11_9	0.004	0.003	0.011	-0.002	0.003
TCRBV11_10	-0.000	0.003	0.000	0.004	0.005

FIG. 108B

TCRBV11_11	-0.002	0.002	-0.003	0.001	0.004
TCRBV11_12	-0.001	0.000	-0.002	0.003	0.002
TCRBV11_13	-0.001	-0.000	-0.001	0.000	0.001
TCRBV11_14	-0.000	-0.000	-0.000	0.000	0.000
TCRBV11_15	-0.000	-0.000	-0.000	0.000	0.000
TCRBV12_4	-0.000	0.000	0.000	0.000	-0.001
TCRBV12_5	0.002	0.001	0.006	0.001	-0.008
TCRBV12_6	0.003	0.002	0.002	-0.004	0.003
TCRBV12_7	0.005	0.001	0.000	-0.005	0.005
TCRBV12_8	0.002	-0.001	-0.006	-0.002	0.002
TCRBV12_9	-0.005	-0.002	-0.005	0.005	-0.001
TCRBV12_10	-0.002	-0.001	0.003	0.003	-0.001
TCRBV12_11	-0.004	-0.000	0.000	0.001	0.001
TCRBV12_12	-0.001	-0.000	0.000	0.001	-0.000
TCRBV13_5	-0.000	-0.000	-0.000	0.000	0.000
TCRBV13_6	0.000	0.001	0.000	-0.003	-0.002
TCRBV13_7	0.002	-0.001	-0.003	-0.002	0.007
TCRBV13_8	0.001	-0.000	-0.002	0.000	0.003
TCRBV13_9	0.000	0.000	0.009	0.010	-0.012
TCRBV13_10	-0.003	0.001	-0.002	-0.003	0.004
TCRBV13_11	-0.001	-0.001	-0.001	-0.003	-0.002
TCRBV13_12	-0.000	-0.000	-0.001	0.000	0.000
TCRBV13_13	0.000	-0.000	-0.000	0.000	0.000
TCRBV14_5	0.000	0.000	0.000	-0.000	-0.001
TCRBV14_6	0.001	-0.000	-0.002	-0.002	0.001
TCRBV14_7	-0.001	0.000	0.000	-0.002	-0.002
TCRBV14_8	0.003	-0.001	-0.001	-0.000	-0.001
TCRBV14_9	0.001	-0.001	-0.002	0.007	0.001
TCRBV14_10	-0.002	0.000	0.002	-0.004	0.002
TCRBV14_11	-0.002	0.001	0.002	-0.001	-0.000
TCRBV14_12	-0.000	0.000	-0.000	0.000	0.000
TCRBV14_13	-0.000	-0.000	-0.000	0.000	0.000
TCRBV15_4	-0.000	0.000	-0.000	0.000	0.000
TCRBV15_5	0.001	-0.002	-0.001	0.000	0.004
TCRBV15_6	0.002	0.000	0.001	-0.001	0.003
TCRBV15_7	0.004	0.003	0.003	0.000	0.004
TCRBV15_8	0.006	0.004	0.005	0.001	0.004
TCRBV15_9	-0.002	0.006	0.007	0.002	-0.000
TCRBV15_10	-0.004	0.003	-0.003	0.001	0.002
TCRBV15_11	-0.003	0.001	-0.002	0.000	-0.000
TCRBV15_12	-0.001	0.000	0.000	-0.000	-0.000
TCRBV16_5	-0.000	0.000	0.000	0.000	-0.001
TCRBV16_6	0.001	-0.001	0.001	0.002	0.001
TCRBV16_7	0.005	0.001	0.002	0.001	0.001
TCRBV16_8	0.007	0.006	-0.002	0.001	-0.003
TCRBV16_9	0.009	0.010	-0.004	0.004	-0.005
TCRBV16_10	0.000	0.006	0.001	0.005	-0.003
TCRBV16_11	-0.005	-0.002	0.007	0.002	0.013
TCRBV16_12	-0.010	-0.004	0.011	-0.014	0.004
TCRBV16_13	-0.000	-0.000	0.000	0.000	-0.000
TCRBV18_3	0.000	-0.000	-0.000	-0.000	0.000
TCRBV18_4	0.000	-0.000	0.000	-0.002	0.001
TCRBV18_5	0.000	0.001	0.003	-0.000	-0.002
TCRBV18_6	-0.002	0.003	0.006	-0.002	-0.002
TCRBV18_7	-0.000	0.006	0.004	0.003	0.003
TCRBV18_8	0.002	0.009	-0.002	-0.000	0.009
TCRBV18_9	-0.001	0.003	0.000	0.003	0.010
TCRBV18_10	-0.000	0.002	-0.000	0.003	0.004
TCRBV18_11	-0.001	-0.000	-0.001	0.001	0.003
TCRBV18_12	-0.000	0.000	0.000	0.000	-0.000
TCRBV18_13	0.000	-0.000	-0.000	-0.000	0.000
TCRBV20_5	0.000	-0.000	0.000	0.000	0.001
TCRBV20_6	0.001	-0.000	0.001	0.000	-0.001
TCRBV20_7	0.002	0.001	0.001	0.001	-0.000

FIG. 108C

TCRBV20_8	0.004	0.002	0.002	-0.001	0.001
TCRBV20_9	0.004	0.004	0.004	0.004	0.005
TCRBV20_10	-0.001	0.006	0.003	-0.004	0.000
TCRBV20_11	-0.005	0.003	0.003	0.000	0.001
TCRBV20_12	-0.002	0.001	-0.001	0.001	0.001
TCRBV20_13	-0.000	-0.003	-0.002	0.001	0.008
TCRBV20_14	-0.000	0.000	-0.000	0.000	0.000

	6	7	8	9	10
TCRBV01_6	0.000	-0.000	-0.000	-0.000	-0.000
TCRBV01_7	-0.002	0.000	0.000	0.001	0.001
TCRBV01_8	0.002	-0.008	0.002	0.011	-0.002
TCRBV01_9	0.000	0.003	-0.003	0.010	0.001
TCRBV01_10	-0.000	0.005	-0.002	-0.008	-0.000
TCRBV01_11	0.007	0.003	0.002	-0.008	0.006
TCRBV01_12	0.002	0.001	-0.002	-0.002	0.003
TCRBV01_13	0.001	-0.001	0.001	-0.001	0.001
TCRBV01_14	0.000	-0.000	0.000	-0.000	-0.000
TCRBV02_6	-0.001	-0.002	-0.001	0.002	0.001
TCRBV02_7	-0.001	-0.001	0.002	0.002	-0.003
TCRBV02_8	-0.004	-0.001	-0.000	-0.003	0.001
TCRBV02_9	-0.001	0.002	-0.009	0.002	0.000
TCRBV02_10	-0.004	-0.002	-0.003	-0.002	0.001
TCRBV02_11	-0.000	0.000	0.002	0.001	-0.000
TCRBV02_12	0.001	0.001	-0.000	0.000	-0.003
TCRBV02_13	0.000	-0.000	0.001	0.001	0.000
TCRBV03_4	0.000	0.000	0.000	-0.000	0.000
TCRBV03_5	0.000	0.000	0.000	-0.000	-0.000
TCRBV03_6	-0.000	0.003	-0.001	0.004	-0.003
TCRBV03_7	0.000	0.004	-0.003	0.002	-0.002
TCRBV03_8	0.000	0.004	-0.005	0.012	-0.001
TCRBV03_9	0.002	0.005	-0.007	0.007	0.000
TCRBV03_10	0.008	-0.009	0.005	-0.000	-0.000
TCRBV03_11	0.005	-0.005	-0.010	-0.008	0.010
TCRBV03_12	0.001	0.000	0.006	-0.008	0.001
TCRBV03_13	-0.005	-0.000	0.014	-0.005	0.004
TCRBV04_6	0.000	0.000	0.000	0.000	0.000
TCRBV04_7	-0.001	0.001	-0.000	0.001	0.005
TCRBV04_8	0.001	0.002	-0.003	-0.000	0.006
TCRBV04_9	-0.000	0.004	-0.001	-0.007	0.008
TCRBV04_10	-0.002	0.003	-0.003	-0.005	0.001
TCRBV04_11	0.000	-0.003	0.004	-0.004	-0.008
TCRBV04_12	0.000	0.000	0.004	0.000	-0.011
TCRBV04_13	0.000	-0.002	-0.001	0.014	-0.001
TCRBV04_14	0.002	-0.005	0.001	0.000	0.001
TCRBV04_15	-0.000	-0.000	0.001	0.001	-0.001
TCRBV051_5	-0.000	0.000	0.000	-0.000	0.001
TCRBV051_6	0.000	0.001	0.001	-0.001	0.001
TCRBV051_7	-0.000	0.001	0.001	0.002	0.005
TCRBV051_8	0.008	-0.007	-0.009	0.000	-0.004
TCRBV051_9	0.014	-0.005	-0.001	0.012	-0.002
TCRBV051_10	-0.003	-0.000	0.004	0.006	-0.008
TCRBV051_11	-0.003	0.002	0.011	-0.006	-0.001
TCRBV051_12	-0.003	0.001	-0.001	0.000	-0.007
TCRBV051_13	-0.000	0.000	0.000	-0.000	0.000
TCRBV052_6	-0.001	-0.000	0.001	0.000	-0.001
TCRBV052_7	-0.005	-0.005	-0.003	0.003	-0.000
TCRBV052_8	-0.013	-0.002	-0.014	0.002	0.002
TCRBV052_9	0.006	-0.008	-0.004	0.014	-0.027
TCRBV052_10	0.006	-0.003	0.009	0.002	0.003
TCRBV052_11	0.011	0.007	0.013	-0.007	0.006
TCRBV052_12	0.006	0.004	0.005	0.000	0.003

FIG. 109A

TCRBV052_13	0.001	0.001	-0.000	0.000	-0.000
TCRBV06_5	-0.000	0.000	-0.000	-0.000	0.000
TCRBV06_6	-0.000	-0.002	0.001	0.001	-0.000
TCRBV06_7	-0.000	-0.002	0.003	0.004	-0.004
TCRBV06_8	-0.003	0.000	0.008	-0.004	0.000
TCRBV06_9	0.009	-0.009	0.007	-0.007	-0.003
TCRBV06_10	0.007	0.005	-0.007	-0.003	0.008
TCRBV06_11	-0.001	0.006	-0.007	0.007	0.005
TCRBV06_12	-0.000	0.004	-0.006	0.006	0.003
TCRBV06_13	-0.000	0.000	-0.001	0.000	0.000
TCRBV07_5	-0.000	-0.000	0.000	0.000	-0.000
TCRBV07_6	-0.003	-0.001	0.008	-0.004	0.005
TCRBV07_7	0.009	0.002	-0.002	-0.005	0.001
TCRBV07_8	-0.005	-0.001	-0.005	0.009	0.007
TCRBV07_9	0.001	-0.007	-0.000	0.002	-0.007
TCRBV07_10	0.006	0.004	-0.005	-0.004	0.001
TCRBV07_11	0.004	0.001	0.004	0.004	0.000
TCRBV07_12	0.000	0.003	-0.001	0.001	0.001
TCRBV07_13	-0.001	0.001	0.000	-0.000	-0.000
TCRBV081_5	-0.000	0.000	0.000	-0.001	0.000
TCRBV081_6	-0.001	0.002	0.005	-0.002	0.001
TCRBV081_7	-0.003	0.009	0.005	-0.004	-0.003
TCRBV081_8	-0.003	0.009	0.003	-0.002	-0.004
TCRBV081_9	-0.009	0.000	-0.005	-0.000	-0.002
TCRBV081_10	0.012	-0.016	-0.002	0.001	0.001
TCRBV081_11	0.005	-0.004	-0.003	0.004	0.005
TCRBV081_12	-0.000	-0.001	-0.003	0.003	0.001
TCRBV082_4	0.000	-0.000	0.000	-0.000	0.003
TCRBV082_5	-0.001	-0.001	-0.002	0.001	0.008
TCRBV082_6	-0.000	-0.001	-0.002	0.002	0.005
TCRBV082_7	0.001	-0.002	-0.002	-0.001	0.013
TCRBV082_8	0.002	-0.002	-0.001	0.001	-0.008
TCRBV082_9	0.001	0.002	0.003	-0.003	-0.011
TCRBV082_10	-0.002	0.001	0.003	0.000	-0.009
TCRBV082_11	-0.000	0.002	0.001	0.000	-0.002
TCRBV083_4	-0.000	0.000	0.001	-0.000	0.000
TCRBV083_5	-0.000	-0.000	-0.000	0.002	0.001
TCRBV083_6	0.001	-0.000	0.001	0.001	-0.000
TCRBV083_7	0.003	0.001	0.005	-0.006	-0.001
TCRBV083_8	0.001	-0.002	-0.004	-0.002	-0.002
TCRBV083_9	-0.003	-0.001	0.002	0.001	-0.005
TCRBV083_10	-0.004	-0.002	-0.000	0.002	0.004
TCRBV083_11	0.002	0.003	-0.001	0.001	0.002
TCRBV083_12	0.001	0.000	-0.003	0.003	0.001
TCRBV09_5	-0.000	0.000	-0.000	-0.001	-0.001
TCRBV09_6	0.000	0.000	0.001	0.001	0.003
TCRBV09_7	-0.001	-0.003	-0.003	0.002	0.007
TCRBV09_8	-0.004	0.002	-0.000	0.010	0.012
TCRBV09_9	-0.004	-0.004	0.003	0.001	0.009
TCRBV09_10	-0.011	0.002	-0.008	-0.001	-0.003
TCRBV09_11	0.007	0.016	-0.011	-0.004	-0.007
TCRBV09_12	-0.002	-0.000	0.001	0.009	-0.011
TCRBV09_13	-0.001	-0.000	0.000	0.002	-0.002
TCRBV09_14	-0.000	-0.000	-0.000	0.000	-0.000
TCRBV09_15	-0.000	-0.000	-0.000	0.000	0.000
TCRBV10_6	-0.000	-0.000	0.001	-0.002	-0.002
TCRBV10_7	-0.003	-0.002	-0.000	-0.000	-0.004
TCRBV10_8	-0.006	-0.006	0.001	0.001	-0.006
TCRBV10_9	-0.010	-0.009	-0.015	-0.015	-0.001
TCRBV10_10	0.003	0.004	0.004	0.007	0.000
TCRBV10_11	0.012	0.010	0.005	0.004	0.007
TCRBV10_12	0.004	0.004	0.003	0.004	0.005
TCRBV10_13	0.000	0.000	0.000	-0.000	0.000
TCRBV11_5	-0.000	-0.000	-0.001	0.000	-0.001

FIG. 109B

TCRBV11_6	-0.001	-0.003	-0.001	0.002	0.002
TCRBV11_7	-0.002	-0.002	-0.001	0.001	0.001
TCRBV11_8	0.001	-0.006	-0.001	0.008	0.004
TCRBV11_9	0.004	0.003	-0.009	-0.006	-0.006
TCRBV11_10	0.002	0.002	0.005	0.002	0.004
TCRBV11_11	0.003	0.002	0.004	-0.003	0.002
TCRBV11_12	0.003	0.005	0.001	-0.001	0.001
TCRBV11_13	0.000	0.002	0.001	-0.001	0.001
TCRBV11_14	0.001	0.000	0.000	-0.000	0.000
TCRBV11_15	0.000	0.000	0.000	-0.000	0.000
TCRBV12_4	-0.000	0.000	-0.000	0.001	-0.000
TCRBV12_5	-0.005	0.002	0.015	-0.000	0.006
TCRBV12_6	-0.002	0.005	0.002	0.001	0.003
TCRBV12_7	-0.003	0.003	0.002	0.011	-0.000
TCRBV12_8	-0.000	0.001	-0.000	0.008	0.003
TCRBV12_9	-0.000	-0.011	-0.002	-0.004	0.003
TCRBV12_10	0.007	0.006	-0.011	-0.020	-0.018
TCRBV12_11	0.003	-0.005	-0.003	0.001	0.004
TCRBV12_12	0.001	-0.001	-0.002	0.000	0.000
TCRBV13_5	0.000	0.000	0.000	0.000	0.000
TCRBV13_6	0.007	0.005	-0.005	-0.000	-0.002
TCRBV13_7	0.003	-0.005	-0.004	0.003	-0.005
TCRBV13_8	-0.009	-0.003	0.003	0.000	0.001
TCRBV13_9	-0.005	0.003	0.010	0.005	0.001
TCRBV13_10	0.001	-0.001	-0.008	-0.005	0.002
TCRBV13_11	0.001	0.002	0.003	-0.004	0.003
TCRBV13_12	0.001	0.000	0.000	0.000	0.001
TCRBV13_13	-0.000	-0.000	-0.000	0.000	-0.000
TCRBV14_5	0.000	0.000	0.000	-0.001	0.000
TCRBV14_6	-0.000	-0.001	0.001	-0.002	-0.000
TCRBV14_7	0.001	-0.001	-0.006	-0.000	0.006
TCRBV14_8	0.002	0.001	-0.004	-0.002	-0.001
TCRBV14_9	-0.003	-0.002	0.004	0.009	-0.001
TCRBV14_10	-0.000	0.001	0.004	-0.000	0.002
TCRBV14_11	0.000	0.001	0.001	-0.002	-0.007
TCRBV14_12	-0.000	0.001	0.000	-0.001	0.001
TCRBV14_13	-0.000	0.000	0.000	-0.000	0.000
TCRBV15_4	0.000	0.000	0.000	0.000	0.001
TCRBV15_5	-0.000	0.003	-0.004	0.004	-0.010
TCRBV15_6	-0.002	0.000	0.003	0.001	0.001
TCRBV15_7	-0.002	-0.001	0.007	0.002	-0.000
TCRBV15_8	0.002	-0.001	0.002	0.009	0.002
TCRBV15_9	0.007	0.002	-0.004	-0.006	0.001
TCRBV15_10	0.004	0.000	-0.003	-0.003	0.010
TCRBV15_11	0.002	-0.001	-0.001	-0.002	0.003
TCRBV15_12	0.000	-0.000	-0.002	-0.000	0.002
TCRBV16_5	-0.000	-0.000	0.002	-0.000	-0.000
TCRBV16_6	-0.004	-0.000	0.004	-0.000	-0.001
TCRBV16_7	-0.003	-0.007	-0.001	-0.012	-0.006
TCRBV16_8	0.003	-0.007	-0.001	0.000	0.003
TCRBV16_9	0.018	-0.007	-0.003	0.001	0.000
TCRBV16_10	0.005	0.014	0.004	0.007	0.009
TCRBV16_11	0.001	0.011	0.007	0.004	-0.019
TCRBV16_12	0.003	-0.007	-0.004	0.017	0.008
TCRBV16_13	-0.000	0.000	-0.000	0.001	-0.000
TCRBV18_3	0.000	-0.000	0.000	0.000	0.000
TCRBV18_4	0.001	-0.000	0.004	0.003	-0.002
TCRBV18_5	0.000	-0.001	0.008	0.003	-0.000
TCRBV18_6	0.003	-0.009	0.012	0.001	-0.001
TCRBV18_7	-0.003	-0.008	0.021	-0.011	-0.004
TCRBV18_8	0.001	-0.012	-0.003	-0.015	0.005
TCRBV18_9	-0.005	0.002	-0.008	-0.008	0.012
TCRBV18_10	-0.002	0.000	-0.005	0.003	0.004
TCRBV18_11	-0.002	0.002	-0.002	0.001	0.000

FIG. 109C

TCRBV18_12	0.000	0.000	-0.000	0.001	0.000
TCRBV18_13	0.000	0.000	0.000	-0.000	0.000
TCRBV20_5	0.000	0.000	-0.000	-0.001	-0.001
TCRBV20_6	-0.000	-0.002	-0.003	-0.002	-0.001
TCRBV20_7	0.002	-0.003	0.002	0.002	-0.000
TCRBV20_8	0.005	0.001	-0.003	0.000	-0.007
TCRBV20_9	-0.004	-0.005	-0.000	-0.001	0.007
TCRBV20_10	0.003	0.002	0.000	0.004	0.009
TCRBV20_11	0.006	0.001	0.004	-0.000	0.007
TCRBV20_12	0.002	0.003	0.001	-0.003	0.002
TCRBV20_13	-0.002	0.004	-0.003	0.003	-0.007
TCRBV20_14	0.000	0.000	0.000	0.000	0.000

	11	12	13	14	15
TCRBV01_6	-0.000	0.001	0.000	-0.000	0.001
TCRBV01_7	-0.003	0.001	0.002	0.002	-0.000
TCRBV01_8	-0.007	0.002	0.004	-0.001	-0.012
TCRBV01_9	0.001	-0.003	-0.016	-0.001	-0.007
TCRBV01_10	-0.005	0.005	0.024	-0.006	-0.001
TCRBV01_11	0.004	0.004	-0.004	0.011	0.008
TCRBV01_12	0.006	0.003	0.003	0.005	0.003
TCRBV01_13	0.000	0.000	0.000	0.001	0.001
TCRBV01_14	-0.000	0.000	0.000	-0.000	0.000
TCRBV02_6	0.001	-0.001	-0.001	0.000	-0.002
TCRBV02_7	0.001	-0.005	0.001	0.001	0.004
TCRBV02_8	-0.006	-0.001	-0.005	0.002	0.002
TCRBV02_9	-0.006	0.002	-0.004	0.001	-0.003
TCRBV02_10	-0.002	-0.000	-0.001	0.006	0.002
TCRBV02_11	0.003	-0.006	0.001	0.004	0.005
TCRBV02_12	0.001	-0.001	-0.002	0.003	0.003
TCRBV02_13	-0.000	0.000	0.001	-0.000	-0.001
TCRBV03_4	0.000	0.000	0.000	-0.000	-0.000
TCRBV03_5	0.000	0.001	0.000	-0.000	-0.000
TCRBV03_6	-0.001	0.004	0.004	0.000	-0.000
TCRBV03_7	0.003	0.005	0.003	-0.001	0.007
TCRBV03_8	-0.002	0.012	0.002	-0.010	0.009
TCRBV03_9	-0.004	0.012	0.005	0.000	-0.001
TCRBV03_10	0.000	-0.007	-0.001	-0.011	-0.006
TCRBV03_11	0.010	-0.009	-0.004	0.015	-0.007
TCRBV03_12	0.000	-0.001	-0.002	0.008	-0.002
TCRBV03_13	-0.012	-0.004	0.007	0.011	-0.005
TCRBV04_6	0.000	0.000	0.000	0.000	0.000
TCRBV04_7	0.001	-0.000	-0.001	0.001	0.002
TCRBV04_8	-0.001	-0.001	-0.003	0.004	0.001
TCRBV04_9	-0.006	-0.005	-0.007	0.002	0.009
TCRBV04_10	-0.002	-0.000	0.003	0.007	-0.002
TCRBV04_11	0.007	0.004	0.003	0.008	-0.004
TCRBV04_12	0.005	0.003	0.003	0.003	-0.005
TCRBV04_13	-0.002	0.002	0.009	-0.021	0.009
TCRBV04_14	-0.002	-0.004	-0.005	-0.003	-0.010
TCRBV04_15	0.001	0.001	-0.001	-0.000	-0.000
TCRBV051_5	0.000	0.000	-0.001	0.000	-0.000
TCRBV051_6	0.005	0.002	-0.001	0.001	-0.002
TCRBV051_7	0.001	-0.006	-0.002	0.005	0.001
TCRBV051_8	0.005	-0.004	0.009	0.000	0.011
TCRBV051_9	0.004	-0.007	0.010	0.010	0.001
TCRBV051_10	0.006	-0.015	-0.002	0.001	-0.004
TCRBV051_11	0.007	0.005	-0.005	0.002	0.011
TCRBV051_12	-0.001	-0.006	-0.002	-0.002	-0.005
TCRBV051_13	-0.000	0.000	-0.001	-0.000	-0.000
TCRBV052_6	-0.000	0.000	-0.002	0.001	-0.001
TCRBV052_7	0.004	-0.003	-0.004	0.006	-0.005

FIG. 109D

TCRBV052_8	0.013	0.001	0.003	0.003	-0.008
TCRBV052_9	-0.006	-0.008	-0.014	0.014	0.012
TCRBV052_10	0.014	-0.010	0.008	0.002	-0.001
TCRBV052_11	0.004	-0.008	0.010	-0.005	0.012
TCRBV052_12	0.000	-0.002	0.005	-0.003	0.004
TCRBV052_13	-0.000	-0.000	-0.001	-0.000	-0.001
TCRBV06_5	0.000	-0.000	-0.000	0.000	0.000
TCRBV06_6	0.004	0.004	-0.003	0.002	0.001
TCRBV06_7	0.002	0.002	-0.002	-0.002	0.003
TCRBV06_8	0.001	-0.002	-0.000	0.002	0.000
TCRBV06_9	-0.003	0.013	-0.003	0.002	-0.010
TCRBV06_10	-0.004	0.002	0.006	0.006	-0.003
TCRBV06_11	-0.003	-0.006	0.006	-0.002	0.003
TCRBV06_12	-0.001	-0.002	0.009	0.004	0.002
TCRBV06_13	-0.001	0.000	0.001	-0.000	-0.002
TCRBV07_5	0.000	-0.000	0.000	0.000	-0.000
TCRBV07_6	-0.000	0.003	-0.001	0.009	-0.003
TCRBV07_7	0.000	0.011	-0.011	0.013	-0.017
TCRBV07_8	0.003	0.003	0.005	0.006	0.001
TCRBV07_9	0.017	-0.006	0.017	0.008	0.008
TCRBV07_10	-0.012	-0.010	0.002	-0.013	0.003
TCRBV07_11	-0.007	0.006	-0.003	-0.008	-0.000
TCRBV07_12	-0.006	0.003	0.004	-0.005	0.001
TCRBV07_13	-0.001	0.001	0.000	-0.000	-0.000
TCRBV081_5	0.001	0.001	-0.000	0.000	-0.000
TCRBV081_6	0.001	-0.000	-0.006	0.004	-0.001
TCRBV081_7	-0.004	-0.003	-0.009	0.003	-0.005
TCRBV081_8	0.002	0.005	-0.005	0.004	-0.007
TCRBV081_9	0.014	-0.013	0.016	-0.011	-0.018
TCRBV081_10	-0.008	0.009	0.001	0.001	0.013
TCRBV081_11	-0.004	0.003	-0.000	0.000	0.012
TCRBV081_12	-0.001	-0.001	0.003	-0.001	0.006
TCRBV082_4	0.002	0.001	-0.002	-0.001	0.000
TCRBV082_5	0.005	0.001	-0.004	0.001	0.003
TCRBV082_6	0.002	0.002	-0.002	0.002	0.001
TCRBV082_7	0.007	0.004	-0.007	-0.000	0.002
TCRBV082_8	-0.005	0.003	0.004	0.002	-0.001
TCRBV082_9	-0.006	-0.006	0.006	-0.002	-0.006
TCRBV082_10	-0.003	-0.002	0.005	-0.001	0.000
TCRBV082_11	-0.001	-0.002	-0.001	-0.001	0.001
TCRBV083_4	-0.001	-0.000	0.000	0.001	-0.000
TCRBV083_5	-0.001	-0.000	0.002	-0.001	0.000
TCRBV083_6	0.001	-0.000	-0.000	0.003	-0.002
TCRBV083_7	-0.005	-0.011	-0.004	-0.004	-0.003
TCRBV083_8	-0.002	-0.005	-0.002	-0.003	0.004
TCRBV083_9	0.003	0.008	0.006	0.006	0.002
TCRBV083_10	0.002	0.005	0.005	0.005	-0.003
TCRBV083_11	0.003	0.005	-0.007	-0.003	0.003
TCRBV083_12	-0.001	-0.002	0.001	-0.004	-0.001
TCRBV09_5	0.001	0.001	-0.000	0.000	-0.001
TCRBV09_6	-0.001	0.001	0.001	0.001	-0.001
TCRBV09_7	-0.003	-0.003	0.002	0.001	-0.001
TCRBV09_8	0.012	0.007	-0.026	-0.001	-0.001
TCRBV09_9	-0.021	-0.014	0.010	0.016	-0.004
TCRBV09_10	0.009	-0.002	0.013	0.013	-0.006
TCRBV09_11	-0.007	-0.002	-0.002	0.011	0.011
TCRBV09_12	0.003	-0.002	0.003	-0.008	-0.001
TCRBV09_13	0.001	0.001	-0.001	-0.002	0.000
TCRBV09_14	0.001	0.001	-0.001	-0.000	0.000
TCRBV09_15	0.000	0.000	-0.000	-0.000	0.000
TCRBV10_6	-0.000	0.002	-0.004	0.005	0.001
TCRBV10_7	-0.005	0.000	-0.002	0.001	-0.001
TCRBV10_8	0.002	0.001	-0.000	0.004	-0.002
TCRBV10_9	-0.010	-0.011	-0.003	0.001	0.008

FIG. 110A

TCRBV10_10	0.008	0.003	0.002	-0.011	0.005
TCRBV10_11	0.004	0.007	0.002	-0.000	-0.012
TCRBV10_12	0.001	-0.001	0.005	-0.000	0.002
TCRBV10_13	0.000	0.000	0.000	-0.000	-0.000
TCRBV11_5	-0.001	-0.000	0.000	0.002	0.001
TCRBV11_6	0.002	-0.002	0.003	0.001	0.002
TCRBV11_7	-0.005	-0.004	-0.003	0.001	-0.004
TCRBV11_8	-0.003	-0.001	-0.003	0.005	-0.002
TCRBV11_9	-0.003	0.000	0.001	-0.013	0.007
TCRBV11_10	0.003	0.006	0.002	0.005	-0.004
TCRBV11_11	-0.000	0.005	0.007	0.005	0.001
TCRBV11_12	0.001	0.004	0.003	0.007	-0.006
TCRBV11_13	0.000	0.003	0.002	-0.001	-0.001
TCRBV11_14	0.001	0.001	0.001	-0.001	-0.000
TCRBV11_15	0.000	0.000	0.000	-0.000	-0.000
TCRBV12_4	-0.000	0.000	-0.000	-0.002	0.001
TCRBV12_5	-0.010	-0.001	-0.000	0.003	0.003
TCRBV12_6	-0.007	-0.009	-0.000	-0.012	0.009
TCRBV12_7	-0.005	-0.006	0.000	0.005	0.001
TCRBV12_8	-0.001	-0.004	0.003	0.005	-0.007
TCRBV12_9	0.005	0.006	-0.003	0.004	0.004
TCRBV12_10	0.014	0.012	0.006	-0.003	-0.009
TCRBV12_11	0.002	0.002	-0.003	-0.000	-0.004
TCRBV12_12	0.001	0.000	-0.002	0.000	0.001
TCRBV13_5	0.000	0.001	0.000	-0.000	-0.001
TCRBV13_6	-0.003	0.001	-0.002	-0.003	-0.016
TCRBV13_7	-0.004	0.008	0.004	0.005	-0.004
TCRBV13_8	-0.005	0.007	0.008	0.009	-0.002
TCRBV13_9	-0.007	0.005	-0.003	-0.014	0.003
TCRBV13_10	0.011	-0.016	-0.005	-0.005	0.012
TCRBV13_11	0.007	-0.003	-0.007	0.007	0.008
TCRBV13_12	0.002	-0.002	0.002	0.002	0.000
TCRBV13_13	0.000	-0.001	0.002	-0.000	-0.001
TCRBV14_5	-0.000	-0.000	-0.002	0.001	0.000
TCRBV14_6	0.000	-0.003	0.001	-0.004	0.000
TCRBV14_7	-0.001	-0.002	-0.001	0.007	0.001
TCRBV14_8	-0.002	0.004	0.006	0.008	-0.007
TCRBV14_9	0.004	-0.003	-0.008	-0.004	0.001
TCRBV14_10	-0.002	-0.005	0.002	-0.005	0.003
TCRBV14_11	0.002	0.006	0.000	0.000	0.001
TCRBV14_12	0.001	0.002	0.001	-0.002	0.001
TCRBV14_13	-0.000	0.001	0.000	-0.001	-0.000
TCRBV15_4	0.000	-0.000	0.001	0.000	0.000
TCRBV15_5	-0.009	0.004	0.001	0.015	0.009
TCRBV15_6	0.000	0.005	0.001	-0.002	-0.004
TCRBV15_7	0.007	-0.002	-0.002	0.005	-0.005
TCRBV15_8	0.009	-0.000	-0.007	-0.004	-0.002
TCRBV15_9	-0.007	-0.012	0.003	-0.013	-0.017
TCRBV15_10	-0.001	0.011	0.010	0.007	0.008
TCRBV15_11	-0.002	0.005	0.005	0.003	0.003
TCRBV15_12	-0.001	0.001	0.001	0.001	0.002
TCRBV16_5	-0.000	0.000	0.000	0.001	-0.001
TCRBV16_6	-0.004	0.001	-0.000	0.010	0.005
TCRBV16_7	0.007	0.003	0.014	-0.008	0.001
TCRBV16_8	-0.001	-0.007	0.003	0.004	-0.009
TCRBV16_9	-0.003	-0.010	-0.013	0.002	-0.009
TCRBV16_10	0.006	-0.009	0.012	0.011	0.012
TCRBV16_11	0.017	-0.005	-0.011	0.007	0.013
TCRBV16_12	0.002	0.010	0.013	0.002	-0.006
TCRBV16_13	-0.000	-0.000	0.001	-0.001	-0.000
TCRBV18_3	0.000	-0.000	0.000	-0.000	0.000
TCRBV18_4	0.002	-0.000	0.002	0.002	0.002
TCRBV18_5	0.003	-0.002	0.003	0.002	0.004
TCRBV18_6	0.006	-0.002	0.007	0.010	0.014

FIG. 110B

TCRBV18_7	-0.004	0.008	0.003	-0.004	-0.001
TCRBV18_8	0.002	-0.001	-0.005	-0.009	0.025
TCRBV18_9	0.004	0.002	-0.009	-0.001	0.005
TCRBV18_10	0.002	-0.002	-0.002	-0.002	0.008
TCRBV18_11	-0.006	0.006	-0.000	-0.001	0.001
TCRBV18_12	-0.000	0.001	0.000	-0.002	0.000
TCRBV18_13	0.000	0.000	-0.000	-0.000	0.000
TCRBV20_5	-0.001	-0.002	-0.000	-0.001	0.001
TCRBV20_6	-0.001	0.000	0.002	0.001	0.001
TCRBV20_7	0.003	0.005	-0.002	-0.000	-0.004
TCRBV20_8	-0.005	0.012	-0.004	-0.001	-0.005
TCRBV20_9	0.004	0.011	-0.000	-0.013	0.001
TCRBV20_10	0.006	0.003	0.009	0.000	0.010
TCRBV20_11	0.000	-0.015	0.000	0.003	-0.016
TCRBV20_12	0.003	-0.005	0.007	0.006	-0.005
TCRBV20_13	-0.015	0.004	0.000	0.016	0.011
TCRBV20_14	0.000	-0.000	0.001	0.000	0.000

	16	17	18	19	20
TCRBV01_6	0.001	-0.001	0.001	0.000	-0.001
TCRBV01_7	-0.000	-0.007	0.006	0.004	-0.005
TCRBV01_8	-0.008	-0.004	0.005	0.005	0.002
TCRBV01_9	0.006	-0.015	0.012	0.014	0.011
TCRBV01_10	0.010	0.019	-0.001	-0.004	-0.003
TCRBV01_11	-0.003	0.004	0.001	-0.008	-0.003
TCRBV01_12	-0.003	-0.000	-0.009	-0.009	0.001
TCRBV01_13	0.001	0.003	-0.003	-0.004	0.002
TCRBV01_14	0.000	0.000	-0.000	-0.000	0.001
TCRBV02_6	0.001	-0.004	0.001	0.001	-0.004
TCRBV02_7	0.001	-0.001	-0.000	-0.004	0.004
TCRBV02_8	0.007	-0.005	0.008	-0.008	0.003
TCRBV02_9	0.007	-0.005	0.001	-0.026	-0.001
TCRBV02_10	0.004	-0.003	0.010	-0.020	0.011
TCRBV02_11	0.004	-0.001	0.001	-0.008	0.007
TCRBV02_12	0.000	-0.001	-0.002	0.001	0.009
TCRBV02_13	-0.001	0.000	-0.001	-0.001	0.000
TCRBV03_4	-0.001	0.000	-0.000	0.002	-0.001
TCRBV03_5	0.000	0.001	-0.000	0.002	-0.001
TCRBV03_6	-0.000	-0.008	0.006	0.002	0.007
TCRBV03_7	-0.002	-0.008	0.000	0.005	0.004
TCRBV03_8	-0.010	-0.005	-0.003	-0.001	-0.002
TCRBV03_9	0.005	0.003	0.010	-0.002	-0.003
TCRBV03_10	0.009	0.006	-0.013	-0.019	-0.006
TCRBV03_11	-0.005	0.005	0.008	0.006	0.008
TCRBV03_12	-0.000	0.005	0.003	-0.013	-0.001
TCRBV03_13	0.006	-0.000	0.001	0.016	0.002
TCRBV04_6	-0.000	-0.000	0.000	0.000	-0.000
TCRBV04_7	0.001	-0.000	-0.002	-0.000	0.007
TCRBV04_8	0.004	0.005	-0.001	0.003	0.007
TCRBV04_9	0.013	0.005	-0.005	0.008	0.008
TCRBV04_10	0.011	0.014	-0.015	0.005	0.006
TCRBV04_11	-0.007	-0.022	0.003	-0.003	-0.014
TCRBV04_12	0.002	-0.009	0.008	-0.000	-0.012
TCRBV04_13	-0.015	0.007	0.007	-0.010	-0.012
TCRBV04_14	-0.009	0.000	0.002	-0.003	0.010
TCRBV04_15	0.001	-0.000	0.003	-0.000	0.001
TCRBV051_5	0.000	0.001	0.000	0.000	-0.000
TCRBV051_6	-0.001	0.003	-0.002	0.003	-0.004
TCRBV051_7	0.004	0.005	-0.002	0.005	-0.024
TCRBV051_8	-0.005	-0.014	-0.009	0.002	0.001
TCRBV051_9	0.004	0.021	-0.012	0.003	0.006
TCRBV051_10	0.011	0.002	-0.005	0.014	0.006

FIG. 110C

TCRBV051_11	0.001	-0.013	-0.014	-0.004	0.006
TCRBV051_12	-0.002	-0.003	0.004	0.004	0.011
TCRBV051_13	0.001	0.000	0.001	0.000	0.001
TCRBV052_6	-0.000	-0.001	0.000	0.003	-0.004
TCRBV052_7	0.004	0.004	0.004	0.003	-0.012
TCRBV052_8	0.010	0.002	-0.029	0.013	0.016
TCRBV052_9	0.003	0.021	-0.007	-0.006	-0.017
TCRBV052_10	0.003	0.002	0.002	0.009	0.005
TCRBV052_11	-0.001	-0.021	-0.007	0.004	0.010
TCRBV052_12	-0.006	-0.005	-0.002	0.001	0.007
TCRBV052_13	0.000	-0.001	0.000	0.001	-0.001
TCRBV06_5	0.000	0.000	-0.000	0.000	0.000
TCRBV06_6	0.002	-0.003	-0.002	0.001	0.003
TCRBV06_7	-0.001	-0.002	0.001	0.001	-0.002
TCRBV06_8	0.008	-0.008	0.004	0.019	0.002
TCRBV06_9	0.001	0.005	-0.011	-0.000	0.002
TCRBV06_10	0.006	0.001	-0.000	-0.003	-0.005
TCRBV06_11	-0.012	0.005	0.017	-0.008	-0.000
TCRBV06_12	-0.002	0.004	0.001	-0.009	0.007
TCRBV06_13	0.001	-0.003	0.002	-0.003	-0.002
TCRBV07_5	0.000	-0.000	0.000	0.000	-0.000
TCRBV07_6	-0.002	0.002	-0.003	0.001	-0.004
TCRBV07_7	-0.005	-0.000	-0.009	-0.005	-0.012
TCRBV07_8	-0.005	0.005	0.000	-0.003	-0.008
TCRBV07_9	-0.016	0.006	0.013	0.007	0.007
TCRBV07_10	0.017	-0.003	0.001	0.002	-0.000
TCRBV07_11	0.004	-0.009	0.006	-0.003	0.016
TCRBV07_12	0.009	-0.001	0.001	-0.001	0.008
TCRBV07_13	0.001	-0.000	0.001	-0.000	-0.000
TCRBV081_5	0.000	0.001	-0.001	0.000	0.000
TCRBV081_6	-0.004	0.003	0.002	0.000	-0.004
TCRBV081_7	-0.004	0.006	-0.000	0.005	-0.007
TCRBV081_8	-0.014	0.001	-0.005	0.001	-0.008
TCRBV081_9	0.001	0.004	0.006	-0.012	0.009
TCRBV081_10	0.017	-0.016	-0.004	-0.002	0.008
TCRBV081_11	0.003	-0.001	0.001	0.006	-0.000
TCRBV081_12	0.002	0.002	0.000	0.002	0.001
TCRBV082_4	0.000	0.001	0.003	0.002	0.002
TCRBV082_5	0.004	0.003	0.005	0.002	0.000
TCRBV082_6	0.001	0.005	0.003	-0.003	0.004
TCRBV082_7	0.005	0.006	0.008	-0.011	0.008
TCRBV082_8	0.002	-0.007	-0.003	0.002	0.000
TCRBV082_9	-0.006	-0.006	-0.007	0.002	-0.006
TCRBV082_10	-0.004	-0.004	-0.006	0.004	-0.007
TCRBV082_11	-0.001	0.002	-0.002	0.001	-0.002
TCRBV083_4	0.000	-0.000	0.000	0.001	0.000
TCRBV083_5	0.001	-0.000	-0.001	-0.001	0.001
TCRBV083_6	-0.001	-0.002	0.004	-0.002	-0.000
TCRBV083_7	0.012	-0.002	0.004	0.004	0.001
TCRBV083_8	0.010	0.004	0.004	0.004	-0.015
TCRBV083_9	-0.009	-0.003	-0.001	0.004	0.012
TCRBV083_10	-0.002	0.001	0.002	0.006	0.003
TCRBV083_11	-0.010	0.001	-0.004	-0.012	-0.001
TCRBV083_12	-0.002	0.001	-0.008	-0.004	-0.000
TCRBV09_5	-0.000	-0.000	-0.001	-0.000	-0.000
TCRBV09_6	-0.000	-0.000	0.002	-0.002	-0.003
TCRBV09_7	-0.002	0.000	0.006	-0.006	-0.006
TCRBV09_8	0.006	0.003	0.009	-0.013	0.019
TCRBV09_9	0.000	-0.011	0.009	-0.001	-0.020
TCRBV09_10	0.001	-0.017	-0.003	-0.019	-0.005
TCRBV09_11	0.001	0.001	0.023	0.002	0.001
TCRBV09_12	0.000	-0.003	0.008	-0.004	0.001
TCRBV09_13	0.003	0.001	0.002	-0.001	0.000
TCRBV09_14	0.002	0.001	0.001	0.000	0.001

FIG. 110D

TCRBV09_15	0.000	0.001	0.000	-0.000	0.000
TCRBV10_6	-0.000	0.000	0.001	-0.006	-0.005
TCRBV10_7	0.002	-0.004	-0.008	-0.018	-0.006
TCRBV10_8	0.010	-0.006	-0.005	-0.011	0.004
TCRBV10_9	0.001	-0.006	0.003	0.010	0.003
TCRBV10_10	-0.006	0.002	0.007	0.004	0.012
TCRBV10_11	-0.002	0.009	0.001	0.017	-0.007
TCRBV10_12	-0.005	0.005	0.001	0.004	-0.000
TCRBV10_13	-0.000	0.000	-0.000	0.001	-0.000
TCRBV11_5	-0.001	0.001	-0.000	-0.000	0.001
TCRBV11_6	-0.003	-0.007	0.005	0.001	0.002
TCRBV11_7	-0.001	-0.007	0.005	-0.001	0.004
TCRBV11_8	-0.000	-0.007	0.002	-0.005	-0.000
TCRBV11_9	0.008	0.001	-0.001	0.000	-0.001
TCRBV11_10	0.003	0.003	-0.001	-0.003	0.006
TCRBV11_11	0.001	0.007	0.001	-0.004	0.003
TCRBV11_12	0.000	0.004	0.002	0.002	-0.002
TCRBV11_13	-0.002	0.003	0.001	0.004	-0.004
TCRBV11_14	-0.001	0.001	-0.001	0.004	-0.002
TCRBV11_15	-0.000	0.000	-0.000	0.001	-0.001
TCRBV12_4	-0.002	0.001	-0.002	-0.002	-0.002
TCRBV12_5	-0.009	0.002	-0.005	-0.002	-0.005
TCRBV12_6	0.005	0.006	-0.006	0.001	-0.004
TCRBV12_7	-0.011	0.003	-0.009	0.001	0.017
TCRBV12_8	0.010	-0.007	-0.001	-0.007	0.001
TCRBV12_9	-0.001	0.000	0.010	-0.000	-0.013
TCRBV12_10	0.002	-0.003	0.003	-0.002	0.002
TCRBV12_11	0.005	0.000	0.007	0.006	0.001
TCRBV12_12	0.001	-0.001	0.003	0.006	0.002
TCRBV13_5	-0.001	0.001	-0.001	0.003	-0.002
TCRBV13_6	0.002	-0.001	0.003	0.010	-0.000
TCRBV13_7	0.003	-0.006	0.003	-0.004	0.020
TCRBV13_8	-0.002	-0.003	0.005	0.009	0.009
TCRBV13_9	-0.001	0.002	-0.008	0.003	0.001
TCRBV13_10	0.005	0.006	0.002	0.005	-0.015
TCRBV13_11	-0.005	0.000	-0.001	-0.018	-0.012
TCRBV13_12	0.001	0.003	-0.003	-0.007	-0.002
TCRBV13_13	-0.001	-0.001	0.001	0.000	0.001
TCRBV14_5	-0.002	-0.000	0.001	-0.002	-0.000
TCRBV14_6	0.006	-0.000	-0.001	-0.002	-0.008
TCRBV14_7	-0.005	-0.003	0.008	0.005	0.001
TCRBV14_8	0.002	-0.004	-0.001	-0.003	-0.008
TCRBV14_9	0.016	0.000	-0.003	-0.000	0.017
TCRBV14_10	-0.008	0.006	-0.004	-0.004	-0.007
TCRBV14_11	-0.007	0.001	0.003	0.004	0.007
TCRBV14_12	-0.002	-0.001	-0.002	0.001	-0.001
TCRBV14_13	-0.001	0.000	0.000	0.001	-0.001
TCRBV15_4	-0.001	0.000	-0.000	-0.000	0.000
TCRBV15_5	-0.012	0.006	-0.005	0.005	0.018
TCRBV15_6	-0.002	-0.006	0.001	0.001	-0.007
TCRBV15_7	-0.002	-0.009	0.005	0.008	-0.010
TCRBV15_8	0.004	-0.006	-0.002	-0.004	-0.022
TCRBV15_9	-0.013	0.001	0.007	-0.010	0.021
TCRBV15_10	0.019	0.005	0.002	-0.005	0.001
TCRBV15_11	0.008	0.006	0.001	-0.000	0.003
TCRBV15_12	0.003	0.001	0.003	0.003	0.002
TCRBV16_5	0.001	-0.000	0.002	0.001	-0.001
TCRBV16_6	-0.002	-0.001	-0.003	0.007	0.010
TCRBV16_7	-0.000	0.007	0.003	0.006	-0.001
TCRBV16_8	0.001	0.014	-0.004	-0.007	0.005
TCRBV16_9	-0.018	-0.012	-0.003	0.003	0.004
TCRBV16_10	0.013	-0.013	-0.006	0.001	-0.005
TCRBV16_11	0.015	0.005	0.001	-0.003	0.005
TCRBV16_12	0.006	0.003	-0.017	0.018	-0.007

FIG. 111A

TCRBV16_13	0.000	-0.002	-0.001	-0.001	-0.001
TCRBV18_3	0.000	0.000	0.000	0.000	0.000
TCRBV18_4	-0.003	0.001	0.009	-0.005	-0.001
TCRBV18_5	-0.001	0.004	0.018	-0.006	-0.001
TCRBV18_6	0.001	0.006	0.031	0.006	0.006
TCRBV18_7	0.001	0.019	0.003	-0.015	0.010
TCRBV18_8	-0.019	-0.003	-0.010	0.005	0.008
TCRBV18_9	-0.023	0.006	-0.004	0.016	-0.004
TCRBV18_10	-0.008	0.011	-0.011	0.011	-0.010
TCRBV18_11	-0.003	0.008	-0.003	0.004	-0.002
TCRBV18_12	-0.002	0.001	-0.001	0.001	-0.001
TCRBV18_13	0.000	0.001	0.000	0.000	0.000
TCRBV20_5	0.001	0.000	0.001	0.000	-0.002
TCRBV20_6	0.002	-0.007	0.001	0.004	-0.002
TCRBV20_7	0.009	-0.006	-0.001	0.009	-0.003
TCRBV20_8	0.007	0.001	0.012	0.019	-0.003
TCRBV20_9	0.007	0.008	0.022	0.003	-0.009
TCRBV20_10	-0.005	-0.018	-0.016	-0.017	-0.004
TCRBV20_11	-0.007	0.004	-0.005	-0.008	0.012
TCRBV20_12	0.001	0.006	-0.001	-0.006	0.002
TCRBV20_13	-0.012	0.009	-0.002	-0.006	0.015
TCRBV20_14	-0.000	0.000	-0.000	-0.000	0.000

	21	22	23	24	25
TCRBV01_6	0.002	0.001	0.001	0.000	0.004
TCRBV01_7	-0.000	0.003	0.001	0.013	-0.004
TCRBV01_8	-0.006	0.008	-0.007	0.009	0.013
TCRBV01_9	0.009	-0.012	-0.017	0.007	0.004
TCRBV01_10	0.019	0.017	-0.004	-0.026	-0.018
TCRBV01_11	0.002	-0.012	0.009	0.008	0.001
TCRBV01_12	-0.007	-0.002	0.015	0.013	0.002
TCRBV01_13	-0.000	-0.002	0.005	-0.001	0.003
TCRBV01_14	0.000	-0.000	0.000	-0.000	-0.000
TCRBV02_6	-0.002	-0.002	-0.001	-0.003	-0.001
TCRBV02_7	-0.003	-0.008	0.008	-0.003	0.004
TCRBV02_8	-0.008	-0.002	0.005	-0.008	0.002
TCRBV02_9	-0.010	-0.020	0.015	-0.009	-0.004
TCRBV02_10	-0.003	-0.004	0.011	-0.021	-0.001
TCRBV02_11	-0.007	0.003	0.005	-0.007	-0.008
TCRBV02_12	-0.002	0.003	0.003	-0.004	-0.003
TCRBV02_13	-0.001	0.001	-0.001	-0.001	0.002
TCRBV03_4	0.001	0.001	-0.001	0.001	0.000
TCRBV03_5	0.003	0.001	-0.001	0.002	0.001
TCRBV03_6	0.009	0.007	0.008	0.001	0.008
TCRBV03_7	0.004	0.002	0.014	-0.002	-0.001
TCRBV03_8	0.006	0.002	0.012	-0.005	0.011
TCRBV03_9	0.012	-0.002	-0.004	0.006	-0.003
TCRBV03_10	-0.023	-0.008	-0.022	0.011	0.009
TCRBV03_11	0.002	0.001	-0.002	0.004	-0.022
TCRBV03_12	0.008	-0.000	-0.012	-0.006	-0.006
TCRBV03_13	-0.002	-0.002	0.012	0.010	0.006
TCRBV04_6	-0.000	0.000	0.000	-0.001	-0.001
TCRBV04_7	0.001	0.001	0.001	0.007	-0.001
TCRBV04_8	0.002	0.002	0.006	0.007	0.002
TCRBV04_9	-0.004	-0.006	0.004	0.016	0.007
TCRBV04_10	0.001	0.003	-0.003	-0.021	0.012
TCRBV04_11	0.008	0.001	-0.005	-0.017	-0.013
TCRBV04_12	0.010	-0.000	0.003	0.003	-0.007
TCRBV04_13	-0.017	-0.005	-0.006	0.004	-0.008
TCRBV04_14	0.001	0.002	-0.001	-0.001	0.010
TCRBV04_15	-0.002	0.003	-0.001	0.002	-0.001
TCRBV051_5	-0.002	0.001	0.002	-0.003	-0.001
TCRBV051_6	-0.009	0.000	0.015	-0.006	-0.018

FIG. 111B

TCRBV051_7	-0.002	0.008	0.012	-0.012	-0.026
TCRBV051_8	0.016	0.007	-0.001	0.021	0.002
TCRBV051_9	-0.022	-0.018	0.001	-0.000	-0.000
TCRBV051_10	0.008	0.006	-0.002	-0.018	0.013
TCRBV051_11	0.006	0.004	-0.030	-0.001	0.004
TCRBV051_12	0.003	0.002	-0.006	0.004	0.010
TCRBV051_13	-0.001	0.002	-0.001	0.004	0.000
TCRBV052_6	-0.002	0.000	0.001	-0.005	-0.001
TCRBV052_7	0.005	0.008	0.000	0.001	0.012
TCRBV052_8	-0.009	0.013	0.002	0.020	-0.019
TCRBV052_9	0.009	0.003	-0.008	0.003	0.009
TCRBV052_10	0.010	-0.009	0.002	-0.015	-0.007
TCRBV052_11	-0.006	-0.000	-0.007	-0.003	-0.004
TCRBV052_12	-0.006	-0.002	-0.002	-0.010	-0.006
TCRBV052_13	-0.002	0.000	0.001	-0.003	-0.001
TCRBV06_5	0.000	0.000	-0.001	-0.001	0.002
TCRBV06_6	0.004	-0.001	0.004	0.009	-0.009
TCRBV06_7	0.006	0.011	0.008	0.001	-0.003
TCRBV06_8	0.003	0.006	0.001	0.003	0.007
TCRBV06_9	0.016	-0.005	-0.003	-0.000	-0.010
TCRBV06_10	-0.009	-0.001	0.001	0.005	0.001
TCRBV06_11	-0.002	-0.008	0.008	0.002	0.021
TCRBV06_12	0.001	-0.003	-0.013	0.006	-0.006
TCRBV06_13	-0.000	0.002	-0.003	-0.002	0.001
TCRBV07_5	0.000	-0.000	0.000	0.000	-0.001
TCRBV07_6	0.003	-0.005	0.008	-0.001	-0.001
TCRBV07_7	-0.005	-0.018	0.010	0.003	-0.007
TCRBV07_8	-0.008	0.009	-0.010	0.003	-0.001
TCRBV07_9	0.000	-0.004	0.003	-0.013	0.028
TCRBV07_10	0.006	0.009	-0.010	0.030	-0.013
TCRBV07_11	0.010	0.005	0.012	0.003	0.003
TCRBV07_12	0.010	0.003	-0.011	-0.003	-0.005
TCRBV07_13	0.003	-0.001	0.002	0.002	0.002
TCRBV081_5	-0.002	0.000	0.003	-0.001	-0.002
TCRBV081_6	-0.004	0.005	-0.003	-0.003	0.002
TCRBV081_7	-0.001	0.003	-0.005	0.008	-0.006
TCRBV081_8	-0.005	0.001	0.005	0.001	-0.010
TCRBV081_9	0.017	-0.033	-0.022	0.019	0.003
TCRBV081_10	0.001	0.016	0.013	-0.015	0.016
TCRBV081_11	-0.004	0.007	0.007	-0.009	-0.002
TCRBV081_12	-0.001	-0.000	0.003	-0.002	-0.002
TCRBV082_4	-0.007	0.006	0.002	-0.001	0.002
TCRBV082_5	-0.002	0.010	0.003	0.007	0.008
TCRBV082_6	-0.003	0.014	0.001	0.003	0.005
TCRBV082_7	0.001	0.014	0.002	0.009	0.009
TCRBV082_8	-0.010	-0.027	-0.012	-0.005	-0.016
TCRBV082_9	0.011	-0.011	-0.002	-0.003	-0.007
TCRBV082_10	0.007	-0.009	-0.001	-0.009	-0.001
TCRBV082_11	0.003	0.003	0.006	-0.000	0.000
TCRBV083_4	-0.000	-0.000	0.001	0.001	0.001
TCRBV083_5	-0.000	-0.000	-0.001	0.001	0.001
TCRBV083_6	-0.004	-0.000	-0.001	0.002	-0.001
TCRBV083_7	-0.004	0.005	-0.000	0.005	-0.004
TCRBV083_8	-0.007	0.004	-0.006	0.003	-0.006
TCRBV083_9	-0.011	-0.005	0.006	-0.002	0.010
TCRBV083_10	0.004	0.001	0.003	-0.013	0.006
TCRBV083_11	0.017	-0.004	-0.006	0.002	-0.011
TCRBV083_12	0.005	-0.001	0.004	0.001	0.004
TCRBV09_5	-0.002	-0.000	0.002	0.001	-0.004
TCRBV09_6	-0.002	0.004	0.006	-0.007	0.003
TCRBV09_7	0.002	0.011	0.008	-0.010	-0.006
TCRBV09_8	-0.012	-0.003	-0.012	-0.038	0.003
TCRBV09_9	-0.012	-0.003	0.009	-0.010	0.030

FIG. 111C

TCRBV09_10	-0.006	0.005	0.008	-0.003	-0.010
TCRBV09_11	0.005	-0.023	-0.020	-0.009	0.010
TCRBV09_12	0.001	0.006	0.014	0.027	0.005
TCRBV09_13	0.001	0.006	0.008	0.015	-0.001
TCRBV09_14	0.002	0.003	0.002	0.008	0.002
TCRBV09_15	0.000	-0.000	0.000	0.001	-0.001
TCRBV10_6	0.008	0.005	-0.006	-0.006	-0.002
TCRBV10_7	0.009	0.005	-0.009	0.001	0.014
TCRBV10_8	0.003	-0.006	-0.005	-0.001	0.018
TCRBV10_9	0.000	-0.012	0.014	0.005	-0.023
TCRBV10_10	-0.005	-0.007	0.005	-0.002	-0.010
TCRBV10_11	-0.011	0.008	0.001	0.006	0.008
TCRBV10_12	-0.006	0.007	0.001	-0.003	-0.005
TCRBV10_13	0.000	0.000	-0.001	0.001	0.000
TCRBV11_5	-0.001	0.001	-0.003	0.002	-0.002
TCRBV11_6	-0.011	0.000	-0.005	0.005	0.001
TCRBV11_7	-0.006	0.003	0.002	0.004	0.001
TCRBV11_8	0.002	-0.000	-0.005	-0.012	-0.008
TCRBV11_9	-0.011	0.008	-0.003	-0.020	-0.018
TCRBV11_10	0.011	-0.012	0.012	0.013	-0.006
TCRBV11_11	0.018	0.003	0.007	0.004	0.013
TCRBV11_12	0.008	-0.007	0.004	0.015	0.014
TCRBV11_13	0.007	0.002	-0.001	0.007	0.008
TCRBV11_14	0.002	0.002	-0.003	0.003	0.000
TCRBV11_15	0.001	0.001	-0.001	0.001	0.000
TCRBV12_4	0.000	0.001	0.002	-0.001	-0.002
TCRBV12_5	0.012	-0.007	0.014	-0.001	-0.002
TCRBV12_6	-0.001	-0.010	0.006	0.002	-0.011
TCRBV12_7	-0.003	-0.018	0.009	-0.002	-0.020
TCRBV12_8	0.001	-0.005	0.002	-0.008	-0.001
TCRBV12_9	0.001	0.012	-0.012	0.016	0.004
TCRBV12_10	-0.023	0.013	-0.001	-0.011	0.011
TCRBV12_11	0.006	0.011	-0.021	0.005	0.016
TCRBV12_12	0.005	0.003	0.001	0.000	0.004
TCRBV13_5	0.001	0.000	-0.001	-0.000	0.000
TCRBV13_6	-0.013	0.003	0.004	0.005	0.008
TCRBV13_7	0.006	0.016	0.001	-0.004	-0.013
TCRBV13_8	-0.008	-0.009	-0.016	0.008	-0.008
TCRBV13_9	0.005	0.003	0.006	-0.012	0.007
TCRBV13_10	-0.002	-0.002	0.015	0.003	-0.004
TCRBV13_11	0.008	-0.001	-0.011	-0.003	0.007
TCRBV13_12	0.001	-0.002	0.003	0.002	0.003
TCRBV13_13	0.001	-0.009	-0.002	0.001	0.000
TCRBV14_5	0.003	0.000	-0.002	-0.000	-0.002
TCRBV14_6	0.006	0.004	-0.002	-0.005	0.000
TCRBV14_7	0.016	-0.004	0.006	-0.007	-0.003
TCRBV14_8	0.003	-0.009	-0.001	0.006	0.003
TCRBV14_9	-0.005	-0.012	-0.003	-0.002	-0.004
TCRBV14_10	-0.011	0.015	-0.001	-0.008	-0.002
TCRBV14_11	-0.014	0.005	0.004	0.010	0.007
TCRBV14_12	0.001	0.000	-0.000	0.003	0.001
TCRBV14_13	0.001	0.000	-0.001	0.001	0.000
TCRBV15_4	-0.000	0.001	0.000	-0.001	0.001
TCRBV15_5	-0.001	0.013	-0.015	0.001	-0.010
TCRBV15_6	-0.009	-0.001	0.003	0.010	-0.001
TCRBV15_7	-0.013	-0.001	-0.003	0.002	-0.003
TCRBV15_8	0.009	0.009	-0.000	0.005	0.001
TCRBV15_9	0.013	0.011	0.018	-0.007	0.007
TCRBV15_10	0.006	-0.018	0.000	0.014	0.006
TCRBV15_11	0.010	-0.009	0.001	-0.000	0.006
TCRBV15_12	0.003	-0.004	-0.000	-0.001	-0.003
TCRBV16_5	-0.001	0.003	0.001	0.003	-0.001
TCRBV16_6	-0.006	0.009	-0.012	0.019	0.002
TCRBV16_7	-0.003	0.005	-0.000	-0.017	0.002

FIG. 111D

TCRBV16_8	-0.001	0.010	0.005	0.016	0.000
TCRBV16_9	0.006	-0.004	-0.007	0.003	-0.027
TCRBV16_10	-0.005	0.008	-0.032	-0.006	0.008
TCRBV16_11	0.013	-0.003	0.034	0.014	0.009
TCRBV16_12	0.014	-0.016	0.004	-0.018	-0.004
TCRBV16_13	0.001	0.001	0.001	-0.002	-0.001
TCRBV18_3	0.000	-0.000	0.000	0.000	-0.000
TCRBV18_4	-0.004	0.009	0.002	0.009	-0.009
TCRBV18_5	-0.004	0.011	0.002	0.009	-0.015
TCRBV18_6	-0.003	0.001	0.002	0.006	-0.035
TCRBV18_7	-0.012	-0.010	-0.007	0.012	0.004
TCRBV18_8	0.001	-0.024	0.003	-0.003	0.021
TCRBV18_9	0.007	-0.001	-0.010	0.002	0.015
TCRBV18_10	0.010	-0.006	-0.006	-0.008	0.013
TCRBV18_11	0.004	0.004	-0.008	0.003	-0.003
TCRBV18_12	0.001	0.001	-0.000	0.001	-0.001
TCRBV18_13	-0.001	0.000	0.001	-0.001	0.000
TCRBV20_5	-0.002	-0.002	-0.002	0.002	-0.000
TCRBV20_6	-0.005	0.002	-0.000	0.001	0.015
TCRBV20_7	0.001	-0.012	0.005	-0.013	-0.012
TCRBV20_8	-0.010	-0.019	0.007	0.007	0.018
TCRBV20_9	0.018	-0.009	-0.012	0.004	-0.019
TCRBV20_10	-0.002	0.001	0.010	0.032	0.000
TCRBV20_11	0.018	0.018	0.002	-0.007	0.010
TCRBV20_12	0.001	0.004	0.003	-0.008	0.007
TCRBV20_13	0.000	0.017	-0.010	0.007	-0.016
TCRBV20_14	-0.000	0.001	0.000	-0.001	0.001

	26	27	28	29	30
TCRBV01_6	-0.004	-0.004	-0.001	0.001	0.004
TCRBV01_7	-0.002	-0.004	0.004	0.005	-0.004
TCRBV01_8	0.015	0.007	0.007	0.005	0.012
TCRBV01_9	0.007	0.014	-0.013	-0.030	-0.036
TCRBV01_10	0.004	0.002	-0.001	0.013	0.002
TCRBV01_11	0.003	0.002	0.004	0.003	0.010
TCRBV01_12	0.004	-0.007	-0.004	0.008	0.011
TCRBV01_13	0.002	0.005	0.001	0.001	-0.000
TCRBV01_14	0.000	0.001	0.000	-0.000	0.000
TCRBV02_6	0.000	0.001	-0.002	0.005	0.022
TCRBV02_7	0.010	-0.006	-0.007	0.004	-0.001
TCRBV02_8	-0.006	-0.009	-0.001	-0.008	0.009
TCRBV02_9	-0.022	0.019	0.013	0.008	-0.010
TCRBV02_10	-0.020	0.005	0.014	-0.004	0.000
TCRBV02_11	-0.020	0.003	-0.003	-0.002	-0.001
TCRBV02_12	-0.009	-0.002	0.014	-0.006	0.002
TCRBV02_13	-0.002	-0.001	-0.000	-0.004	0.000
TCRBV03_4	0.002	-0.000	-0.001	0.000	-0.001
TCRBV03_5	-0.000	-0.001	0.000	0.003	-0.000
TCRBV03_6	0.011	-0.004	0.000	0.008	-0.007
TCRBV03_7	0.006	-0.006	0.013	-0.001	-0.009
TCRBV03_8	-0.007	-0.004	0.028	-0.012	-0.007
TCRBV03_9	-0.012	-0.004	-0.007	-0.024	0.011
TCRBV03_10	0.002	0.007	0.009	0.001	0.017
TCRBV03_11	0.011	0.005	-0.014	0.016	-0.006
TCRBV03_12	0.009	-0.005	-0.018	0.009	0.002
TCRBV03_13	0.007	0.025	-0.015	0.006	-0.001
TCRBV04_6	-0.002	0.001	0.000	0.001	0.001
TCRBV04_7	0.001	-0.008	0.003	0.004	0.010
TCRBV04_8	0.010	-0.013	-0.001	0.003	-0.006
TCRBV04_9	0.013	-0.022	0.003	0.016	-0.007
TCRBV04_10	-0.005	0.007	-0.015	-0.039	-0.015
TCRBV04_11	-0.004	0.012	-0.002	0.018	-0.005
TCRBV04_12	-0.005	0.003	0.003	0.025	0.019

FIG. 112A

TCRBV04_13	-0.003	0.013	-0.001	-0.007	0.004
TCRBV04_14	-0.007	0.002	0.007	-0.012	-0.003
TCRBV04_15	0.002	0.004	0.002	-0.010	0.001
TCRBV051_5	0.002	-0.001	-0.003	0.002	0.010
TCRBV051_6	0.006	-0.015	-0.004	0.018	-0.002
TCRBV051_7	0.023	0.003	0.014	-0.008	0.004
TCRBV051_8	-0.023	-0.014	-0.006	-0.025	0.007
TCRBV051_9	0.019	0.024	0.037	0.025	-0.007
TCRBV051_10	-0.025	0.001	-0.008	0.010	-0.011
TCRBV051_11	0.009	0.008	0.012	-0.012	0.021
TCRBV051_12	-0.014	-0.014	-0.011	0.012	0.010
TCRBV051_13	-0.000	0.001	-0.002	-0.006	0.010
TCRBV052_6	-0.000	-0.000	0.003	-0.015	0.002
TCRBV052_7	-0.007	0.014	0.008	-0.021	0.001
TCRBV052_8	-0.011	-0.011	0.012	-0.001	0.018
TCRBV052_9	0.007	-0.002	-0.009	0.024	-0.019
TCRBV052_10	-0.009	-0.019	0.009	0.005	0.015
TCRBV052_11	0.018	0.006	0.009	0.008	0.013
TCRBV052_12	0.003	0.001	-0.003	0.014	0.012
TCRBV052_13	-0.004	0.002	0.002	0.004	-0.001
TCRBV06_5	0.000	-0.001	0.002	0.002	0.000
TCRBV06_6	-0.007	-0.005	0.003	0.005	-0.003
TCRBV06_7	0.001	-0.004	0.019	0.016	-0.003
TCRBV06_8	-0.005	-0.008	0.011	-0.005	-0.016
TCRBV06_9	-0.021	0.002	0.006	0.005	-0.028
TCRBV06_10	0.016	0.026	-0.013	-0.020	0.006
TCRBV06_11	0.035	0.001	-0.016	-0.015	0.018
TCRBV06_12	0.000	-0.001	-0.015	0.007	0.025
TCRBV06_13	0.010	0.006	0.002	0.010	-0.001
TCRBV07_5	-0.000	-0.000	0.001	-0.001	-0.001
TCRBV07_6	0.003	0.016	-0.020	-0.007	0.004
TCRBV07_7	0.004	0.003	-0.017	-0.007	0.008
TCRBV07_8	-0.002	-0.013	-0.006	0.022	-0.014
TCRBV07_9	0.020	0.013	0.003	-0.028	-0.000
TCRBV07_10	-0.000	-0.003	0.013	0.007	0.017
TCRBV07_11	0.019	0.010	0.012	0.005	-0.013
TCRBV07_12	-0.010	-0.011	0.011	0.012	-0.000
TCRBV07_13	-0.004	-0.000	0.001	0.003	-0.000
TCRBV081_5	0.000	-0.003	-0.001	0.004	0.002
TCRBV081_6	0.007	-0.005	0.003	-0.006	0.012
TCRBV081_7	0.004	0.020	0.022	-0.021	0.009
TCRBV081_8	0.000	0.006	0.037	-0.009	0.011
TCRBV081_9	-0.007	0.014	0.003	0.016	-0.008
TCRBV081_10	-0.002	-0.019	-0.022	-0.008	0.028
TCRBV081_11	-0.001	-0.010	-0.009	0.004	-0.015
TCRBV081_12	-0.001	-0.003	-0.033	0.019	-0.039
TCRBV082_4	-0.005	0.002	0.010	0.007	0.011
TCRBV082_5	-0.001	0.011	-0.000	0.005	0.007
TCRBV082_6	-0.001	0.011	0.017	0.015	0.014
TCRBV082_7	-0.001	0.015	-0.005	0.016	0.002
TCRBV082_8	-0.002	-0.016	-0.005	-0.013	-0.001
TCRBV082_9	0.007	-0.011	-0.009	-0.017	-0.010
TCRBV082_10	-0.003	-0.009	-0.004	-0.011	-0.012
TCRBV082_11	0.005	-0.002	-0.003	-0.001	-0.010
TCRBV083_4	0.001	0.002	-0.001	0.000	-0.000
TCRBV083_5	-0.002	-0.002	-0.008	0.006	-0.010
TCRBV083_6	-0.007	0.001	-0.010	0.006	-0.006
TCRBV083_7	-0.006	0.002	-0.021	0.001	-0.008
TCRBV083_8	-0.005	0.004	-0.011	0.004	0.020
TCRBV083_9	0.001	-0.011	0.008	-0.008	-0.006
TCRBV083_10	0.010	0.008	0.009	-0.008	-0.008
TCRBV083_11	0.005	-0.009	0.019	0.002	0.002
TCRBV083_12	0.004	0.005	0.016	-0.003	0.016

FIG. 112B

TCRBV09_5	-0.000	-0.004	-0.002	0.003	0.001
TCRBV09_6	-0.001	-0.002	0.004	-0.005	0.003
TCRBV09_7	-0.006	-0.005	0.018	0.012	-0.013
TCRBV09_8	-0.004	-0.008	-0.002	-0.011	-0.014
TCRBV09_9	-0.025	-0.014	0.026	0.021	-0.003
TCRBV09_10	-0.014	0.002	-0.027	0.012	0.029
TCRBV09_11	0.002	-0.026	0.002	0.011	0.001
TCRBV09_12	-0.017	0.014	-0.027	-0.023	0.017
TCRBV09_13	-0.005	0.010	-0.010	-0.008	-0.011
TCRBV09_14	-0.002	0.004	0.004	0.002	0.003
TCRBV09_15	-0.000	0.001	0.001	0.001	-0.002
TCRBV10_6	0.006	0.001	0.001	-0.009	0.013
TCRBV10_7	0.009	-0.010	0.005	0.006	0.012
TCRBV10_8	0.013	0.012	0.015	-0.002	0.015
TCRBV10_9	0.013	0.009	0.025	-0.015	-0.026
TCRBV10_10	0.008	-0.016	-0.006	-0.003	-0.005
TCRBV10_11	-0.035	0.005	-0.015	0.014	-0.010
TCRBV10_12	-0.013	-0.000	-0.024	0.010	0.002
TCRBV10_13	0.001	-0.000	-0.000	0.000	-0.000
TCRBV11_5	0.002	0.004	-0.003	0.003	0.003
TCRBV11_6	0.001	-0.002	0.002	0.005	0.007
TCRBV11_7	0.006	0.005	-0.005	0.018	-0.000
TCRBV11_8	0.013	-0.009	0.010	0.016	0.004
TCRBV11_9	0.002	0.019	0.001	-0.008	-0.010
TCRBV11_10	0.010	0.008	-0.004	-0.003	-0.002
TCRBV11_11	0.000	0.008	-0.001	-0.013	0.001
TCRBV11_12	-0.011	-0.015	-0.001	-0.009	0.003
TCRBV11_13	0.001	-0.002	-0.000	-0.004	-0.003
TCRBV11_14	0.004	-0.000	-0.002	0.000	-0.001
TCRBV11_15	0.001	-0.000	-0.001	0.000	-0.000
TCRBV12_4	0.001	0.002	-0.001	0.004	0.001
TCRBV12_5	0.011	0.008	-0.023	0.013	-0.003
TCRBV12_6	0.000	-0.005	-0.002	-0.016	0.027
TCRBV12_7	-0.007	-0.016	-0.008	-0.011	0.004
TCRBV12_8	-0.007	0.008	0.012	0.009	-0.008
TCRBV12_9	0.003	-0.003	0.016	0.007	-0.007
TCRBV12_10	-0.002	0.004	-0.002	0.004	-0.016
TCRBV12_11	0.001	-0.000	0.009	-0.003	-0.004
TCRBV12_12	-0.001	0.001	-0.000	-0.006	0.005
TCRBV13_5	0.003	-0.001	-0.001	-0.002	-0.002
TCRBV13_6	-0.009	0.004	-0.008	0.005	-0.019
TCRBV13_7	0.027	0.002	-0.010	0.010	0.014
TCRBV13_8	-0.004	-0.015	0.022	0.015	-0.009
TCRBV13_9	-0.011	0.026	0.012	0.010	0.024
TCRBV13_10	-0.001	-0.006	0.002	-0.021	-0.010
TCRBV13_11	-0.003	-0.013	-0.012	-0.014	-0.013
TCRBV13_12	0.000	0.004	-0.007	-0.008	0.009
TCRBV13_13	-0.002	-0.001	0.003	0.006	0.007
TCRBV14_5	0.001	-0.004	-0.001	0.001	-0.000
TCRBV14_6	0.001	-0.003	0.002	0.002	-0.002
TCRBV14_7	0.011	0.004	0.004	-0.005	0.007
TCRBV14_8	-0.010	0.014	0.006	0.000	-0.007
TCRBV14_9	0.010	0.016	-0.013	0.003	0.003
TCRBV14_10	-0.021	-0.002	-0.012	-0.007	-0.000
TCRBV14_11	0.008	-0.025	0.012	0.007	-0.002
TCRBV14_12	0.001	-0.000	0.003	-0.000	0.001
TCRBV14_13	0.001	0.000	-0.001	-0.000	-0.001
TCRBV15_4	-0.000	-0.002	0.000	-0.005	-0.001
TCRBV15_5	-0.007	0.017	-0.005	0.010	0.007
TCRBV15_6	0.002	0.001	-0.004	0.009	0.003
TCRBV15_7	0.026	-0.019	-0.019	0.003	0.008
TCRBV15_8	0.019	0.012	-0.002	-0.007	-0.021
TCRBV15_9	0.007	0.003	-0.000	0.018	-0.009
TCRBV15_10	-0.011	0.008	0.016	-0.020	0.015

FIG. 112C

TCRBV15_11	-0.005	-0.005	0.012	-0.004	-0.001
TCRBV15_12	-0.001	-0.000	-0.000	0.002	-0.002
TCRBV16_5	0.000	0.003	0.003	-0.004	0.001
TCRBV16_6	0.005	0.026	-0.007	0.001	-0.003
TCRBV16_7	0.021	0.004	0.013	0.006	-0.009
TCRBV16_8	0.020	-0.036	-0.003	-0.010	0.011
TCRBV16_9	-0.016	0.001	0.017	-0.010	0.025
TCRBV16_10	0.001	0.009	0.007	0.004	-0.015
TCRBV16_11	-0.003	0.002	0.012	0.036	0.020
TCRBV16_12	-0.007	-0.003	-0.018	-0.004	0.009
TCRBV16_13	0.005	0.002	0.005	0.004	0.002
TCRBV18_3	-0.000	-0.000	-0.000	0.000	-0.000
TCRBV18_4	-0.008	0.003	0.007	-0.016	-0.002
TCRBV18_5	-0.020	-0.011	0.009	-0.012	0.010
TCRBV18_6	-0.025	0.017	0.016	-0.024	-0.004
TCRBV18_7	-0.004	-0.032	-0.000	-0.013	-0.017
TCRBV18_8	-0.023	0.032	-0.024	0.030	0.000
TCRBV18_9	-0.017	-0.006	0.003	0.016	0.037
TCRBV18_10	0.001	-0.003	0.017	0.010	-0.005
TCRBV18_11	0.004	-0.008	0.007	-0.000	-0.007
TCRBV18_12	0.002	0.001	0.004	0.000	0.003
TCRBV18_13	0.000	-0.001	0.000	0.002	0.001
TCRBV20_5	0.006	0.001	-0.001	0.001	0.004
TCRBV20_6	0.011	-0.004	-0.017	-0.022	0.023
TCRBV20_7	0.012	0.002	0.003	-0.001	0.017
TCRBV20_8	-0.001	0.007	0.016	0.013	0.023
TCRBV20_9	0.006	0.001	-0.018	0.035	0.005
TCRBV20_10	0.004	-0.003	0.006	0.003	-0.075
TCRBV20_11	-0.011	0.003	0.018	-0.009	-0.004
TCRBV20_12	0.002	-0.009	0.006	-0.010	0.007
TCRBV20_13	0.001	0.020	-0.014	-0.000	-0.002
TCRBV20_14	-0.000	-0.001	0.000	-0.004	-0.001

	31	32	33	34	35
TCRBV01_6	-0.001	0.003	0.000	0.004	0.001
TCRBV01_7	0.021	0.004	0.008	0.007	0.002
TCRBV01_8	0.023	-0.027	0.014	-0.033	0.003
TCRBV01_9	0.030	0.049	0.013	0.015	0.006
TCRBV01_10	-0.009	0.000	-0.003	-0.011	-0.001
TCRBV01_11	-0.039	-0.031	-0.025	0.018	-0.014
TCRBV01_12	-0.014	0.014	-0.012	-0.005	-0.004
TCRBV01_13	-0.005	-0.005	-0.010	-0.007	-0.003
TCRBV01_14	0.000	-0.000	0.000	0.000	-0.001
TCRBV02_6	0.006	0.014	-0.002	0.010	0.014
TCRBV02_7	-0.019	0.000	-0.001	-0.003	0.015
TCRBV02_8	0.012	-0.013	0.009	-0.006	0.008
TCRBV02_9	0.003	-0.021	-0.003	0.051	0.015
TCRBV02_10	0.004	0.008	0.022	0.017	-0.007
TCRBV02_11	0.003	0.002	0.011	0.007	-0.015
TCRBV02_12	-0.019	-0.007	0.020	-0.012	-0.004
TCRBV02_13	-0.001	-0.007	0.013	-0.001	0.005
TCRBV03_4	0.000	0.001	-0.002	-0.002	-0.001
TCRBV03_5	-0.001	0.001	-0.001	0.003	0.001
TCRBV03_6	0.023	-0.012	-0.012	-0.016	0.007
TCRBV03_7	0.003	-0.007	0.018	0.005	-0.017
TCRBV03_8	0.005	-0.023	0.016	-0.011	0.009
TCRBV03_9	-0.003	0.006	0.001	-0.022	0.016
TCRBV03_10	-0.031	0.013	-0.011	0.020	-0.007
TCRBV03_11	0.005	0.009	0.002	0.035	-0.032
TCRBV03_12	-0.000	0.021	-0.013	0.002	0.020
TCRBV03_13	0.007	-0.002	-0.013	-0.026	-0.006
TCRBV04_6	-0.003	0.002	-0.001	-0.002	0.000
TCRBV04_7	-0.006	0.004	-0.009	-0.001	-0.010

FIG. 112D

TCRBV04_8	0.020	-0.023	-0.003	0.020	0.014
TCRBV04_9	0.021	0.000	-0.030	0.005	0.015
TCRBV04_10	-0.030	-0.019	0.008	0.017	0.027
TCRBV04_11	-0.021	0.005	0.018	-0.039	0.030
TCRBV04_12	0.016	0.012	0.054	0.013	0.014
TCRBV04_13	0.000	0.031	-0.035	-0.010	-0.044
TCRBV04_14	-0.003	-0.017	-0.006	-0.005	-0.037
TCRBV04_15	0.005	0.006	0.005	0.001	-0.010
TCRBV051_5	-0.012	-0.019	0.001	-0.001	-0.001
TCRBV051_6	0.008	0.004	-0.011	0.014	0.014
TCRBV051_7	-0.016	-0.016	0.010	-0.002	0.016
TCRBV051_8	0.007	-0.010	-0.002	0.010	0.007
TCRBV051_9	0.005	0.038	0.035	-0.012	0.031
TCRBV051_10	0.011	-0.011	-0.024	-0.008	0.013
TCRBV051_11	0.003	0.000	-0.002	0.031	-0.003
TCRBV051_12	-0.001	-0.028	-0.007	0.026	-0.043
TCRBV051_13	-0.005	-0.004	0.007	-0.001	0.001
TCRBV052_6	-0.002	-0.004	0.002	0.012	-0.011
TCRBV052_7	-0.014	0.004	0.007	0.016	-0.004
TCRBV052_8	0.009	-0.007	-0.003	0.005	0.010
TCRBV052_9	-0.016	-0.010	0.009	0.020	0.021
TCRBV052_10	0.030	-0.039	-0.004	0.002	-0.006
TCRBV052_11	-0.011	0.011	-0.002	0.006	0.020
TCRBV052_12	0.007	-0.003	-0.001	-0.002	0.006
TCRBV052_13	-0.003	0.002	-0.002	-0.002	-0.001
TCRBV06_5	0.004	-0.001	0.001	-0.000	-0.006
TCRBV06_6	-0.006	0.007	0.007	-0.008	-0.009
TCRBV06_7	-0.014	0.019	-0.004	-0.012	-0.002
TCRBV06_8	-0.024	0.031	-0.030	-0.009	-0.001
TCRBV06_9	-0.009	0.001	-0.004	-0.004	-0.037
TCRBV06_10	0.036	-0.027	0.011	0.013	-0.003
TCRBV06_11	0.005	-0.031	-0.007	0.006	0.032
TCRBV06_12	0.014	0.015	0.010	-0.005	0.001
TCRBV06_13	0.002	-0.006	0.000	0.007	0.015
TCRBV07_5	-0.000	0.000	0.001	0.000	-0.002
TCRBV07_6	0.009	-0.008	-0.002	-0.022	-0.002
TCRBV07_7	0.019	0.004	0.019	-0.016	-0.018
TCRBV07_8	0.012	0.001	-0.026	0.005	-0.003
TCRBV07_9	-0.005	0.002	-0.034	-0.008	-0.016
TCRBV07_10	-0.015	-0.003	0.014	-0.003	0.006
TCRBV07_11	-0.007	-0.006	0.002	0.010	0.005
TCRBV07_12	-0.004	0.014	0.010	0.015	0.018
TCRBV07_13	-0.003	0.002	0.001	0.007	0.002
TCRBV081_5	-0.001	-0.006	0.003	-0.001	0.001
TCRBV081_6	-0.018	-0.003	-0.007	0.018	0.005
TCRBV081_7	0.002	-0.018	-0.023	-0.002	0.023
TCRBV081_8	0.003	0.007	-0.010	0.011	-0.013
TCRBV081_9	-0.004	-0.002	0.015	-0.013	0.007
TCRBV081_10	0.017	0.031	0.017	0.004	-0.042
TCRBV081_11	0.004	-0.001	0.000	0.013	0.006
TCRBV081_12	-0.003	-0.008	0.004	-0.030	0.011
TCRBV082_4	-0.003	-0.001	0.002	-0.005	-0.001
TCRBV082_5	0.010	0.008	0.013	-0.003	0.002
TCRBV082_6	0.008	-0.006	0.004	-0.009	-0.019
TCRBV082_7	-0.004	0.026	-0.001	-0.000	0.037
TCRBV082_8	-0.011	-0.041	-0.013	-0.038	-0.014
TCRBV082_9	0.006	0.001	-0.010	0.017	0.009
TCRBV082_10	-0.001	-0.005	-0.001	0.023	-0.015
TCRBV082_11	-0.004	0.018	0.006	0.015	-0.000
TCRBV083_4	0.000	0.000	-0.001	-0.002	-0.001
TCRBV083_5	0.008	0.002	0.011	-0.002	0.012
TCRBV083_6	0.005	-0.002	-0.011	0.006	-0.005
TCRBV083_7	0.009	0.000	-0.003	-0.044	-0.005

FIG. 113A

TCRBV083_8	0.004	-0.035	-0.002	-0.036	-0.000
TCRBV083_9	-0.016	0.012	-0.028	0.005	-0.008
TCRBV083_10	-0.015	0.023	0.003	0.031	0.008
TCRBV083_11	-0.002	0.002	0.017	0.022	0.005
TCRBV083_12	0.008	-0.002	0.013	0.019	-0.004
TCRBV09_5	0.004	-0.001	0.005	-0.002	0.002
TCRBV09_6	0.006	0.010	0.003	-0.002	0.018
TCRBV09_7	0.014	-0.021	-0.041	0.034	0.003
TCRBV09_8	-0.027	-0.005	0.017	-0.046	0.021
TCRBV09_9	-0.011	0.011	-0.004	0.005	0.006
TCRBV09_10	-0.014	-0.016	0.007	-0.007	-0.001
TCRBV09_11	-0.006	-0.006	0.033	-0.001	-0.031
TCRBV09_12	0.001	0.012	0.003	0.026	0.040
TCRBV09_13	0.006	0.008	0.007	-0.000	0.026
TCRBV09_14	0.003	0.005	0.008	0.007	0.019
TCRBV09_15	0.003	0.001	-0.002	0.003	0.006
TCRBV10_6	-0.004	0.001	-0.001	0.006	0.019
TCRBV10_7	-0.006	0.019	-0.016	-0.015	-0.000
TCRBV10_8	0.017	0.007	-0.007	-0.033	-0.006
TCRBV10_9	-0.001	0.009	0.013	-0.000	0.014
TCRBV10_10	-0.004	-0.028	-0.014	0.007	-0.006
TCRBV10_11	-0.006	-0.001	0.016	0.037	-0.025
TCRBV10_12	0.004	-0.008	0.010	-0.001	0.004
TCRBV10_13	0.000	0.000	-0.001	-0.001	-0.000
TCRBV11_5	-0.003	-0.006	0.000	0.012	0.007
TCRBV11_6	0.000	0.013	-0.012	0.027	0.010
TCRBV11_7	-0.007	-0.007	-0.004	-0.001	-0.001
TCRBV11_8	0.022	-0.006	-0.018	-0.011	-0.023
TCRBV11_9	0.025	0.007	-0.020	-0.002	0.007
TCRBV11_10	-0.003	0.009	0.002	-0.023	-0.026
TCRBV11_11	-0.010	0.004	0.012	-0.008	0.004
TCRBV11_12	-0.013	-0.010	0.022	0.002	0.006
TCRBV11_13	-0.005	0.001	0.008	-0.002	0.008
TCRBV11_14	0.001	0.001	-0.004	-0.004	-0.002
TCRBV11_15	0.000	0.001	-0.001	-0.001	-0.001
TCRBV12_4	-0.003	-0.008	-0.001	0.002	-0.006
TCRBV12_5	0.005	0.011	0.006	-0.004	0.011
TCRBV12_6	-0.020	0.021	0.026	-0.006	-0.023
TCRBV12_7	-0.004	0.029	0.008	0.024	-0.021
TCRBV12_8	0.034	-0.001	-0.009	0.005	0.002
TCRBV12_9	-0.014	-0.028	-0.014	0.014	-0.009
TCRBV12_10	0.012	0.006	-0.015	-0.009	0.026
TCRBV12_11	-0.016	-0.030	-0.002	-0.017	0.016
TCRBV12_12	0.006	0.001	0.001	-0.008	0.003
TCRBV13_5	0.001	0.006	-0.001	0.003	0.004
TCRBV13_6	-0.030	0.001	0.002	0.022	0.005
TCRBV13_7	-0.007	-0.006	0.010	0.022	0.012
TCRBV13_8	-0.003	-0.004	0.012	0.006	-0.003
TCRBV13_9	-0.003	-0.047	0.011	0.002	0.008
TCRBV13_10	0.020	0.001	0.002	-0.027	-0.018
TCRBV13_11	0.016	0.029	-0.020	-0.005	0.013
TCRBV13_12	0.005	0.011	-0.025	-0.006	-0.016
TCRBV13_13	0.001	0.009	0.009	-0.016	-0.005
TCRBV14_5	-0.000	0.003	0.001	0.002	0.004
TCRBV14_6	0.003	0.001	0.010	-0.002	-0.003
TCRBV14_7	-0.002	-0.007	-0.007	0.011	0.010
TCRBV14_8	0.001	0.004	-0.014	0.009	-0.011
TCRBV14_9	-0.009	-0.020	-0.001	0.008	-0.021
TCRBV14_10	0.009	0.019	-0.007	-0.010	-0.008
TCRBV14_11	0.001	0.000	0.010	-0.022	0.032
TCRBV14_12	-0.003	-0.001	0.009	0.007	-0.002
TCRBV14_13	0.000	0.001	-0.001	-0.002	-0.001
TCRBV15_4	-0.001	-0.005	0.015	0.001	0.006
TCRBV15_5	0.007	0.002	-0.019	-0.020	-0.010

FIG. 113B

TCRBV15_6	0.004	0.004	0.020	-0.003	0.004
TCRBV15_7	-0.006	0.009	0.015	0.005	0.010
TCRBV15_8	0.023	-0.022	0.023	0.020	-0.039
TCRBV15_9	-0.033	0.013	-0.019	0.002	0.013
TCRBV15_10	0.005	0.010	-0.036	-0.021	-0.001
TCRBV15_11	0.007	0.001	-0.014	0.005	0.005
TCRBV15_12	0.001	-0.005	0.001	-0.000	0.003
TCRBV16_5	0.001	0.004	0.003	0.001	-0.009
TCRBV16_6	-0.009	-0.012	0.002	0.023	-0.018
TCRBV16_7	0.022	0.003	0.037	0.021	-0.036
TCRBV16_8	-0.032	-0.013	0.036	-0.020	-0.009
TCRBV16_9	0.018	-0.011	-0.041	-0.011	0.054
TCRBV16_10	0.000	-0.011	0.006	0.020	0.000
TCRBV16_11	0.009	0.001	-0.031	0.000	-0.009
TCRBV16_12	-0.006	0.003	-0.020	0.009	0.052
TCRBV16_13	0.004	-0.003	-0.001	0.002	0.000
TCRBV18_3	0.001	-0.001	-0.002	0.001	0.001
TCRBV18_4	0.003	0.008	0.006	0.002	-0.015
TCRBV18_5	-0.001	0.012	0.013	-0.007	0.036
TCRBV18_6	-0.023	-0.008	0.018	-0.004	0.009
TCRBV18_7	0.062	-0.022	0.010	0.035	0.045
TCRBV18_8	0.001	-0.015	0.030	0.008	0.018
TCRBV18_9	0.013	0.013	0.021	-0.018	0.012
TCRBV18_10	0.005	0.015	0.015	-0.003	0.013
TCRBV18_11	0.007	0.022	-0.017	-0.008	0.001
TCRBV18_12	-0.000	-0.001	-0.002	0.002	-0.004
TCRBV18_13	-0.003	-0.004	-0.001	0.000	-0.000
TCRBV20_5	-0.004	-0.004	0.001	0.008	0.010
TCRBV20_6	-0.022	0.009	-0.010	0.039	0.010
TCRBV20_7	-0.013	0.003	-0.001	0.004	0.007
TCRBV20_8	0.007	0.009	-0.008	-0.014	-0.003
TCRBV20_9	-0.005	0.007	-0.036	0.018	-0.011
TCRBV20_10	-0.014	-0.020	0.003	-0.032	0.005
TCRBV20_11	0.020	0.004	0.016	-0.013	-0.023
TCRBV20_12	0.029	0.005	0.007	-0.008	-0.002
TCRBV20_13	0.010	-0.002	0.001	-0.013	-0.009
TCRBV20_14	-0.001	-0.004	0.012	0.000	0.005

	36	37	38	39	40
TCRBV01_6	-0.004	-0.000	-0.003	-0.001	0.003
TCRBV01_7	-0.001	-0.010	0.004	0.017	0.013
TCRBV01_8	-0.031	0.010	-0.008	0.014	0.030
TCRBV01_9	0.001	-0.015	-0.006	0.056	0.019
TCRBV01_10	-0.006	-0.018	0.010	-0.060	0.027
TCRBV01_11	0.036	0.023	-0.014	-0.019	-0.043
TCRBV01_12	0.033	0.003	0.020	-0.017	-0.026
TCRBV01_13	0.007	0.006	0.006	-0.006	-0.021
TCRBV01_14	0.001	-0.001	-0.000	0.001	0.001
TCRBV02_6	0.001	0.003	0.006	0.021	-0.002
TCRBV02_7	0.010	-0.015	0.011	0.015	-0.007
TCRBV02_8	0.004	-0.023	0.003	-0.029	-0.021
TCRBV02_9	-0.001	0.002	0.008	-0.009	0.013
TCRBV02_10	-0.003	-0.021	0.011	0.007	0.002
TCRBV02_11	0.007	-0.024	-0.035	0.025	0.028
TCRBV02_12	-0.006	0.010	0.006	0.017	-0.004
TCRBV02_13	-0.012	0.003	0.001	-0.002	0.004
TCRBV03_4	-0.000	0.002	-0.000	-0.001	-0.000
TCRBV03_5	-0.000	-0.002	-0.001	0.002	0.000
TCRBV03_6	0.014	0.026	-0.002	-0.015	-0.008
TCRBV03_7	0.009	0.007	-0.003	-0.036	-0.015
TCRBV03_8	0.002	0.003	-0.025	0.001	-0.038
TCRBV03_9	-0.020	-0.012	-0.006	0.036	-0.035
TCRBV03_10	0.017	0.017	0.022	-0.018	0.048

FIG. 113C

TCRBV03_11	-0.026	-0.021	0.020	0.017	0.006
TCRBV03_12	0.017	-0.022	0.012	0.010	0.035
TCRBV03_13	0.023	0.000	-0.008	-0.009	0.010
TCRBV04_6	-0.001	-0.001	0.001	-0.003	0.002
TCRBV04_7	0.009	-0.008	0.018	-0.014	0.002
TCRBV04_8	-0.022	-0.022	0.007	0.011	-0.001
TCRBV04_9	-0.048	0.000	-0.015	0.012	0.036
TCRBV04_10	0.017	-0.026	-0.041	-0.014	0.023
TCRBV04_11	0.013	0.033	-0.018	-0.012	0.017
TCRBV04_12	0.033	-0.020	0.047	0.017	0.006
TCRBV04_13	0.006	-0.005	-0.008	0.010	-0.052
TCRBV04_14	-0.012	0.051	-0.001	-0.005	-0.003
TCRBV04_15	0.003	-0.001	0.010	-0.002	-0.030
TCRBV051_5	0.005	0.012	-0.015	0.007	-0.011
TCRBV051_6	0.012	0.031	-0.016	-0.015	0.029
TCRBV051_7	0.010	0.017	-0.020	0.036	0.006
TCRBV051_8	0.014	0.004	0.015	0.009	-0.023
TCRBV051_9	-0.037	-0.017	-0.047	0.000	-0.003
TCRBV051_10	-0.006	-0.025	0.048	0.015	0.005
TCRBV051_11	-0.035	-0.030	0.021	0.006	-0.045
TCRBV051_12	0.028	0.017	0.032	-0.001	-0.015
TCRBV051_13	0.005	-0.001	0.025	0.024	0.022
TCRBV052_6	0.019	0.019	0.022	0.026	0.027
TCRBV052_7	0.002	-0.010	-0.048	-0.009	-0.000
TCRBV052_8	0.001	-0.004	0.001	0.005	-0.021
TCRBV052_9	-0.011	0.034	0.025	0.017	-0.004
TCRBV052_10	0.007	-0.022	0.018	0.030	0.008
TCRBV052_11	-0.013	0.001	0.014	0.013	-0.039
TCRBV052_12	-0.003	-0.011	0.008	0.002	-0.007
TCRBV052_13	-0.005	0.001	0.003	-0.001	0.003
TCRBV06_5	0.004	-0.002	0.002	-0.007	0.001
TCRBV06_6	0.015	-0.016	0.003	-0.003	-0.005
TCRBV06_7	0.017	-0.017	-0.016	0.004	-0.019
TCRBV06_8	0.026	0.021	-0.016	0.001	0.001
TCRBV06_9	-0.024	0.016	0.007	0.001	0.002
TCRBV06_10	-0.008	0.002	0.035	0.008	-0.031
TCRBV06_11	-0.015	-0.004	-0.004	0.003	0.016
TCRBV06_12	0.021	-0.001	-0.014	-0.017	0.035
TCRBV06_13	0.002	-0.001	0.014	-0.005	0.004
TCRBV07_5	-0.001	0.003	-0.003	0.001	0.001
TCRBV07_6	0.012	0.011	0.000	0.007	-0.022
TCRBV07_7	-0.014	-0.019	0.007	0.010	-0.042
TCRBV07_8	0.021	0.042	0.007	-0.030	0.000
TCRBV07_9	-0.018	0.007	0.018	-0.024	0.022
TCRBV07_10	0.021	-0.023	0.002	0.020	0.017
TCRBV07_11	-0.007	-0.028	0.000	0.008	0.021
TCRBV07_12	0.023	0.012	-0.019	-0.010	0.004
TCRBV07_13	-0.001	-0.007	-0.003	0.003	0.002
TCRBV081_5	0.005	0.002	0.004	-0.015	-0.008
TCRBV081_6	0.010	-0.011	0.009	-0.014	-0.002
TCRBV081_7	-0.005	-0.015	-0.004	-0.015	0.003
TCRBV081_8	0.011	-0.000	0.015	0.016	0.033
TCRBV081_9	0.022	-0.000	-0.028	0.017	-0.019
TCRBV081_10	-0.041	0.019	-0.041	-0.023	0.034
TCRBV081_11	0.004	0.017	0.023	0.009	0.019
TCRBV081_12	-0.005	-0.011	0.022	0.025	-0.059
TCRBV082_4	0.008	-0.001	0.016	0.030	0.001
TCRBV082_5	0.002	0.014	0.016	-0.009	-0.007
TCRBV082_6	0.022	-0.015	0.004	0.001	-0.012
TCRBV082_7	-0.005	0.025	0.006	-0.023	0.014
TCRBV082_8	0.003	-0.035	-0.014	0.006	0.034
TCRBV082_9	-0.008	0.009	-0.016	-0.014	-0.027
TCRBV082_10	-0.018	-0.000	-0.015	0.005	-0.007

FIG. 113D

TCRBV082_11	-0.005	0.003	0.002	0.004	0.005
TCRBV083_4	0.002	-0.000	-0.001	-0.001	0.001
TCRBV083_5	0.023	0.013	0.002	-0.005	0.005
TCRBV083_6	0.005	0.017	-0.000	-0.002	0.012
TCRBV083_7	0.009	0.018	0.005	-0.024	0.000
TCRBV083_8	-0.019	-0.001	0.005	-0.003	-0.038
TCRBV083_9	-0.007	-0.034	0.000	0.040	0.026
TCRBV083_10	0.003	-0.012	-0.006	0.016	-0.008
TCRBV083_11	-0.021	-0.006	0.003	-0.015	0.003
TCRBV083_12	0.007	0.006	-0.009	-0.007	0.000
TCRBV09_5	0.001	0.001	0.009	-0.003	0.003
TCRBV09_6	0.010	0.000	-0.014	0.009	-0.007
TCRBV09_7	-0.014	0.011	-0.003	0.042	-0.025
TCRBV09_8	0.002	0.002	0.046	-0.001	-0.018
TCRBV09_9	0.005	-0.036	0.045	-0.019	-0.025
TCRBV09_10	-0.057	0.037	-0.058	0.047	0.001
TCRBV09_11	0.028	0.008	-0.033	-0.016	0.013
TCRBV09_12	-0.001	-0.008	0.043	-0.064	0.014
TCRBV09_13	-0.007	-0.002	0.014	-0.016	-0.021
TCRBV09_14	-0.001	-0.004	-0.012	0.006	0.007
TCRBV09_15	-0.003	0.005	-0.001	-0.004	-0.001
TCRBV10_6	0.019	0.001	0.016	0.030	0.009
TCRBV10_7	-0.021	0.017	0.026	0.033	-0.016
TCRBV10_8	0.005	-0.014	-0.011	-0.003	-0.001
TCRBV10_9	-0.014	0.031	0.006	-0.031	-0.009
TCRBV10_10	0.013	-0.009	-0.009	-0.021	0.056
TCRBV10_11	0.001	-0.005	-0.017	0.004	-0.036
TCRBV10_12	-0.004	-0.021	-0.011	-0.011	-0.003
TCRBV10_13	-0.000	0.001	-0.000	-0.001	-0.000
TCRBV11_5	0.006	-0.004	0.004	-0.000	-0.006
TCRBV11_6	0.018	-0.000	-0.007	0.011	-0.024
TCRBV11_7	0.024	-0.021	-0.020	0.017	-0.002
TCRBV11_8	0.035	-0.038	-0.016	-0.029	0.015
TCRBV11_9	0.013	0.003	-0.021	-0.001	-0.015
TCRBV11_10	0.002	0.019	0.024	-0.002	0.008
TCRBV11_11	-0.014	0.005	0.008	0.003	0.012
TCRBV11_12	-0.029	0.024	0.041	-0.007	0.018
TCRBV11_13	-0.017	0.003	-0.002	-0.004	-0.002
TCRBV11_14	-0.000	0.004	-0.001	-0.003	-0.001
TCRBV11_15	-0.000	0.001	-0.000	-0.001	-0.000
TCRBV12_4	-0.007	0.003	-0.006	0.017	-0.015
TCRBV12_5	0.002	-0.016	0.008	0.001	-0.010
TCRBV12_6	-0.004	0.008	0.023	-0.010	-0.008
TCRBV12_7	-0.006	0.025	0.017	0.001	0.021
TCRBV12_8	0.022	0.034	0.006	0.003	0.032
TCRBV12_9	-0.006	-0.035	-0.012	-0.007	-0.002
TCRBV12_10	-0.010	-0.023	0.027	-0.023	0.026
TCRBV12_11	0.013	0.006	-0.040	0.009	-0.021
TCRBV12_12	-0.003	-0.003	-0.022	0.010	-0.022
TCRBV13_5	0.007	0.003	-0.001	-0.002	-0.004
TCRBV13_6	0.018	0.014	-0.013	0.017	0.006
TCRBV13_7	0.050	0.006	-0.008	0.006	-0.018
TCRBV13_8	-0.048	-0.034	0.013	-0.070	-0.027
TCRBV13_9	-0.023	0.026	0.021	0.038	0.068
TCRBV13_10	0.000	0.004	0.006	0.007	0.011
TCRBV13_11	-0.001	-0.009	-0.024	-0.002	-0.015
TCRBV13_12	0.006	-0.007	-0.008	0.002	0.006
TCRBV13_13	-0.009	-0.002	0.015	0.005	-0.025
TCRBV14_5	0.000	-0.001	-0.003	-0.003	-0.006
TCRBV14_6	0.010	-0.005	0.005	-0.010	0.004
TCRBV14_7	0.004	0.001	-0.002	0.013	-0.013
TCRBV14_8	-0.012	-0.000	-0.003	-0.010	0.044
TCRBV14_9	-0.004	0.021	0.014	-0.048	-0.039
TCRBV14_10	0.006	-0.037	-0.023	0.047	0.014

FIG. 114A

TCRBV14_11	0.001	0.018	0.014	0.016	-0.011
TCRBV14_12	-0.005	0.001	0.000	-0.003	0.007
TCRBV14_13	0.000	0.001	-0.001	-0.002	0.000
TCRBV15_4	-0.011	-0.000	0.000	-0.001	0.001
TCRBV15_5	0.007	-0.008	0.011	0.006	-0.001
TCRBV15_6	-0.029	-0.011	-0.011	-0.029	-0.000
TCRBV15_7	0.014	0.039	-0.007	-0.011	0.010
TCRBV15_8	0.022	-0.048	-0.005	-0.045	0.019
TCRBV15_9	-0.025	0.003	-0.003	0.014	-0.034
TCRBV15_10	0.031	0.022	0.023	0.039	0.012
TCRBV15_11	0.026	0.007	0.002	0.010	-0.003
TCRBV15_12	0.002	-0.007	0.000	0.003	-0.001
TCRBV16_5	0.002	0.002	0.006	0.006	-0.012
TCRBV16_6	0.015	0.008	-0.025	-0.007	-0.001
TCRBV16_7	0.029	0.025	0.057	0.062	-0.014
TCRBV16_8	0.007	-0.042	0.011	0.037	0.013
TCRBV16_9	0.001	0.005	0.016	-0.027	0.007
TCRBV16_10	-0.028	0.045	0.007	0.007	-0.008
TCRBV16_11	-0.011	-0.021	-0.039	0.001	-0.011
TCRBV16_12	0.021	-0.019	0.014	-0.009	-0.010
TCRBV16_13	-0.002	0.002	0.005	-0.001	0.004
TCRBV18_3	-0.001	0.001	0.000	0.003	-0.000
TCRBV18_4	0.009	-0.002	-0.011	0.000	0.007
TCRBV18_5	0.002	0.003	-0.019	0.004	-0.008
TCRBV18_6	-0.018	0.008	0.014	-0.006	0.009
TCRBV18_7	0.020	0.031	-0.046	0.015	-0.029
TCRBV18_8	0.030	-0.024	-0.019	0.010	0.007
TCRBV18_9	0.004	0.018	-0.014	-0.013	0.050
TCRBV18_10	0.004	0.011	0.013	-0.027	-0.014
TCRBV18_11	0.011	0.001	0.013	0.003	0.001
TCRBV18_12	-0.002	-0.001	0.001	-0.001	0.002
TCRBV18_13	0.003	0.001	-0.001	-0.009	-0.007
TCRBV20_5	0.002	-0.006	0.002	-0.007	-0.005
TCRBV20_6	0.012	-0.016	0.004	0.001	0.003
TCRBV20_7	0.019	0.009	-0.029	-0.002	-0.026
TCRBV20_8	0.009	0.007	0.004	0.018	-0.008
TCRBV20_9	-0.050	-0.002	0.004	0.012	0.017
TCRBV20_10	0.015	-0.010	0.020	0.013	0.049
TCRBV20_11	0.014	0.017	-0.041	-0.023	-0.011
TCRBV20_12	0.008	-0.000	0.031	-0.038	-0.018
TCRBV20_13	0.018	0.000	0.015	0.012	0.001
TCRBV20_14	-0.009	-0.000	0.000	-0.001	0.001

	41	42	43	44	45
TCRBV01_6	-0.001	0.004	-0.005	0.001	0.003
TCRBV01_7	0.017	-0.018	-0.033	-0.012	0.001
TCRBV01_8	-0.011	-0.048	-0.017	0.053	-0.006
TCRBV01_9	0.018	0.015	0.014	-0.056	-0.022
TCRBV01_10	-0.020	0.017	0.031	0.027	-0.036
TCRBV01_11	0.026	0.007	-0.003	-0.046	-0.010
TCRBV01_12	0.001	0.019	-0.000	0.008	0.052
TCRBV01_13	-0.000	0.009	0.009	0.005	0.011
TCRBV01_14	0.001	0.000	0.001	-0.001	-0.001
TCRBV02_6	0.014	-0.027	0.021	0.000	-0.001
TCRBV02_7	-0.003	-0.017	0.004	-0.033	0.004
TCRBV02_8	0.009	0.046	-0.043	-0.012	-0.026
TCRBV02_9	0.002	-0.002	-0.002	0.024	0.013
TCRBV02_10	-0.003	-0.024	-0.003	0.001	0.003
TCRBV02_11	-0.000	-0.012	0.024	-0.014	-0.043
TCRBV02_12	0.025	0.010	-0.047	0.002	-0.010
TCRBV02_13	0.001	-0.012	-0.002	0.000	-0.014
TCRBV03_4	-0.001	0.001	0.001	0.001	0.002
TCRBV03_5	-0.002	0.002	0.001	-0.000	0.003

FIG. 114B

TCRBV03_6	0.014	-0.012	0.039	0.026	0.006
TCRBV03_7	0.024	-0.030	0.049	-0.043	0.008
TCRBV03_8	0.002	0.018	0.017	0.024	-0.006
TCRBV03_9	-0.025	-0.022	-0.020	0.003	-0.022
TCRBV03_10	0.020	0.009	-0.009	-0.006	0.009
TCRBV03_11	-0.019	0.040	-0.041	0.008	0.027
TCRBV03_12	-0.008	0.026	-0.020	-0.001	0.007
TCRBV03_13	0.025	-0.026	-0.019	-0.031	-0.044
TCRBV04_6	0.003	0.004	0.003	0.001	-0.010
TCRBV04_7	0.010	0.005	0.037	0.016	-0.003
TCRBV04_8	-0.005	0.035	-0.021	-0.012	0.013
TCRBV04_9	-0.001	0.037	0.004	0.056	-0.074
TCRBV04_10	-0.021	-0.002	-0.022	-0.022	0.084
TCRBV04_11	0.003	-0.059	0.028	-0.027	0.010
TCRBV04_12	-0.006	-0.010	-0.005	-0.032	0.004
TCRBV04_13	0.015	-0.010	-0.054	-0.023	-0.024
TCRBV04_14	0.005	-0.006	0.030	0.033	0.031
TCRBV04_15	-0.005	0.006	0.001	0.010	-0.031
TCRBV051_5	-0.018	0.012	0.025	-0.018	0.029
TCRBV051_6	-0.024	0.020	0.047	0.027	0.026
TCRBV051_7	-0.052	0.009	-0.015	0.048	-0.031
TCRBV051_8	-0.020	-0.021	0.007	-0.028	0.005
TCRBV051_9	0.006	-0.038	-0.037	0.012	-0.003
TCRBV051_10	0.051	0.009	0.007	-0.006	0.047
TCRBV051_11	0.063	-0.022	0.011	0.046	-0.009
TCRBV051_12	-0.053	0.025	-0.052	-0.038	-0.087
TCRBV051_13	-0.011	0.014	0.051	-0.031	0.021
TCRBV052_6	-0.006	-0.026	0.020	0.022	0.025
TCRBV052_7	-0.019	-0.008	-0.002	0.032	-0.048
TCRBV052_8	0.003	-0.030	0.023	0.019	-0.003
TCRBV052_9	0.015	0.040	0.027	-0.013	-0.046
TCRBV052_10	-0.052	-0.002	-0.030	-0.015	0.029
TCRBV052_11	0.015	0.008	-0.014	-0.020	0.036
TCRBV052_12	-0.016	0.014	0.008	-0.015	0.022
TCRBV052_13	0.001	0.011	0.009	0.001	-0.015
TCRBV06_5	0.015	-0.016	0.009	-0.006	0.003
TCRBV06_6	0.008	-0.010	-0.009	0.002	0.005
TCRBV06_7	0.017	0.004	-0.010	-0.014	-0.001
TCRBV06_8	0.003	0.013	-0.046	0.029	-0.005
TCRBV06_9	-0.015	-0.043	-0.046	-0.028	0.016
TCRBV06_10	0.003	-0.014	0.075	0.005	-0.051
TCRBV06_11	-0.010	0.040	0.039	-0.028	0.036
TCRBV06_12	0.008	0.026	-0.024	0.021	-0.003
TCRBV06_13	0.002	0.006	0.008	-0.001	-0.009
TCRBV07_5	-0.006	-0.007	0.002	0.008	0.010
TCRBV07_6	0.038	-0.007	-0.009	0.010	-0.023
TCRBV07_7	0.009	-0.001	-0.008	0.039	-0.001
TCRBV07_8	-0.010	-0.028	0.002	-0.028	0.030
TCRBV07_9	-0.004	-0.005	-0.011	0.005	-0.005
TCRBV07_10	0.008	0.009	0.011	-0.033	0.019
TCRBV07_11	0.000	0.027	0.017	-0.033	-0.005
TCRBV07_12	-0.006	0.016	-0.005	0.013	-0.035
TCRBV07_13	0.000	0.000	-0.002	-0.002	0.001
TCRBV081_5	-0.009	0.004	0.002	0.007	0.015
TCRBV081_6	-0.027	0.010	0.024	0.027	-0.009
TCRBV081_7	0.013	-0.027	-0.018	-0.031	-0.000
TCRBV081_8	-0.047	-0.002	-0.028	-0.064	-0.036
TCRBV081_9	0.036	0.013	0.010	0.047	-0.008
TCRBV081_10	0.010	0.011	-0.002	-0.001	0.008
TCRBV081_11	0.021	-0.002	-0.001	-0.006	0.002
TCRBV081_12	0.002	-0.008	0.013	0.021	0.028
TCRBV082_4	0.010	-0.011	0.016	0.007	-0.013
TCRBV082_5	-0.002	0.005	-0.014	0.011	0.018
TCRBV082_6	-0.010	0.001	0.001	-0.007	-0.020

FIG. 114C

TCRBV082_7	-0.003	0.000	-0.003	-0.078	-0.037
TCRBV082_8	-0.006	0.001	0.030	-0.005	-0.081
TCRBV082_9	-0.009	0.005	-0.040	0.042	0.050
TCRBV082_10	0.010	0.015	0.016	0.035	0.022
TCRBV082_11	0.010	-0.016	-0.007	-0.006	0.060
TCRBV083_4	0.002	-0.002	-0.001	-0.003	-0.003
TCRBV083_5	0.014	0.044	-0.015	0.011	0.015
TCRBV083_6	-0.013	-0.005	-0.013	0.001	0.001
TCRBV083_7	-0.004	0.006	-0.034	0.013	-0.022
TCRBV083_8	-0.010	-0.036	0.033	-0.016	0.003
TCRBV083_9	-0.025	-0.002	0.030	-0.028	0.000
TCRBV083_10	-0.001	-0.028	0.035	-0.013	-0.011
TCRBV083_11	-0.005	-0.002	-0.015	0.020	0.003
TCRBV083_12	0.040	0.025	-0.020	0.015	0.014
TCRBV09_5	0.002	0.001	0.002	0.004	-0.000
TCRBV09_6	0.010	0.012	-0.019	0.040	0.015
TCRBV09_7	0.044	-0.044	-0.042	-0.060	-0.051
TCRBV09_8	0.000	-0.005	-0.024	0.017	-0.003
TCRBV09_9	0.031	-0.015	0.017	0.049	0.005
TCRBV09_10	0.054	0.080	-0.059	-0.049	0.019
TCRBV09_11	0.006	-0.030	-0.013	-0.014	0.025
TCRBV09_12	-0.047	-0.023	-0.080	0.040	0.007
TCRBV09_13	-0.028	-0.022	0.042	-0.005	0.021
TCRBV09_14	-0.032	0.000	0.029	-0.026	0.007
TCRBV09_15	-0.011	-0.007	0.012	-0.002	-0.004
TCRBV10_6	-0.012	-0.024	-0.001	0.021	0.012
TCRBV10_7	-0.030	0.035	0.034	-0.017	0.017
TCRBV10_8	-0.033	0.024	0.016	-0.037	-0.007
TCRBV10_9	-0.011	-0.027	-0.018	-0.010	0.025
TCRBV10_10	0.071	-0.025	-0.030	0.000	-0.034
TCRBV10_11	0.007	0.029	0.010	0.041	0.012
TCRBV10_12	0.009	-0.012	-0.011	0.002	-0.026
TCRBV10_13	-0.001	0.000	0.001	0.000	0.001
TCRBV11_5	0.005	0.001	0.014	0.013	-0.011
TCRBV11_6	-0.004	-0.017	0.015	-0.031	0.019
TCRBV11_7	-0.005	0.020	0.015	0.014	0.022
TCRBV11_8	-0.004	-0.020	0.019	0.010	0.031
TCRBV11_9	-0.004	0.006	-0.042	-0.005	0.004
TCRBV11_10	-0.002	0.030	-0.013	0.005	0.001
TCRBV11_11	0.022	-0.001	0.006	0.002	-0.020
TCRBV11_12	0.023	-0.003	-0.014	-0.024	-0.052
TCRBV11_13	0.004	-0.011	-0.006	-0.006	-0.010
TCRBV11_14	-0.002	0.002	0.003	0.002	0.004
TCRBV11_15	-0.001	0.001	0.001	0.001	0.002
TCRBV12_4	0.012	0.005	0.002	-0.015	0.004
TCRBV12_5	0.020	0.007	-0.016	-0.007	-0.006
TCRBV12_6	-0.010	-0.012	0.010	-0.028	0.018
TCRBV12_7	-0.022	-0.018	0.059	0.017	-0.035
TCRBV12_8	0.008	-0.025	-0.020	0.029	0.024
TCRBV12_9	-0.017	0.011	-0.023	-0.001	-0.008
TCRBV12_10	0.035	0.001	0.003	-0.003	-0.014
TCRBV12_11	-0.014	0.015	-0.003	-0.002	0.010
TCRBV12_12	-0.014	0.017	-0.012	0.010	0.006
TCRBV13_5	0.001	0.009	0.003	-0.014	0.001
TCRBV13_6	0.015	-0.034	0.041	0.003	-0.011
TCRBV13_7	0.008	-0.034	-0.039	0.035	-0.022
TCRBV13_8	-0.030	0.048	-0.009	-0.011	-0.008
TCRBV13_9	0.007	0.014	-0.032	0.011	0.026
TCRBV13_10	0.047	0.001	0.002	-0.038	-0.009
TCRBV13_11	-0.028	0.003	0.009	0.032	-0.008
TCRBV13_12	-0.003	-0.010	0.012	-0.008	0.003
TCRBV13_13	-0.017	0.004	0.014	-0.010	0.027
TCRBV14_5	-0.006	0.006	-0.008	0.006	-0.002

FIG. 114D

TCRBV14_6	0.013	-0.005	0.017	0.004	-0.027
TCRBV14_7	0.007	-0.018	-0.063	0.031	0.009
TCRBV14_8	0.016	0.011	0.038	-0.045	0.002
TCRBV14_9	-0.004	-0.003	0.016	-0.002	0.012
TCRBV14_10	-0.030	0.010	0.024	-0.015	0.021
TCRBV14_11	0.016	0.013	0.001	0.025	-0.007
TCRBV14_12	-0.013	-0.014	-0.024	-0.005	-0.009
TCRBV14_13	0.000	0.000	0.000	0.000	0.001
TCRBV15_4	0.003	-0.013	-0.005	-0.006	-0.014
TCRBV15_5	0.031	0.006	0.012	0.003	0.032
TCRBV15_6	-0.006	-0.012	0.009	-0.042	-0.031
TCRBV15_7	-0.021	-0.003	-0.009	-0.004	-0.040
TCRBV15_8	0.021	0.033	-0.003	0.003	0.049
TCRBV15_9	-0.030	-0.001	0.008	-0.012	-0.010
TCRBV15_10	-0.010	-0.011	0.013	0.056	0.005
TCRBV15_11	0.046	0.003	-0.019	-0.022	0.002
TCRBV15_12	-0.003	0.003	-0.009	0.004	-0.002
TCRBV16_5	0.007	0.006	0.011	-0.005	0.018
TCRBV16_6	0.015	0.036	0.034	-0.018	0.027
TCRBV16_7	0.001	0.061	0.016	0.043	-0.038
TCRBV16_8	0.027	-0.075	-0.031	-0.021	0.032
TCRBV16_9	0.022	0.031	0.020	0.017	-0.015
TCRBV16_10	-0.068	-0.048	-0.027	-0.004	-0.013
TCRBV16_11	-0.018	-0.043	0.014	0.037	-0.007
TCRBV16_12	-0.011	0.040	0.002	-0.058	-0.023
TCRBV16_13	-0.002	0.004	0.001	-0.000	0.010
TCRBV18_3	0.002	-0.003	-0.005	-0.004	-0.000
TCRBV18_4	0.014	0.020	-0.008	0.011	-0.014
TCRBV18_5	0.015	0.045	0.030	0.026	-0.038
TCRBV18_6	0.017	0.049	0.044	0.009	0.046
TCRBV18_7	0.007	-0.026	0.010	-0.044	0.043
TCRBV18_8	-0.054	-0.020	-0.004	0.017	-0.071
TCRBV18_9	0.025	-0.018	0.015	0.016	0.044
TCRBV18_10	0.056	0.034	-0.023	-0.046	-0.009
TCRBV18_11	-0.002	0.035	-0.028	0.019	-0.034
TCRBV18_12	0.001	0.000	-0.003	-0.001	0.007
TCRBV18_13	-0.007	0.002	0.001	0.003	0.010
TCRBV20_5	0.012	0.004	0.013	0.007	-0.014
TCRBV20_6	0.051	-0.025	-0.015	0.063	-0.029
TCRBV20_7	0.023	0.041	0.023	-0.029	-0.041
TCRBV20_8	-0.050	0.054	-0.046	-0.015	0.087
TCRBV20_9	0.017	-0.065	0.036	0.010	0.030
TCRBV20_10	-0.014	0.028	-0.014	0.030	0.004
TCRBV20_11	-0.007	0.022	0.041	-0.006	-0.034
TCRBV20_12	-0.009	-0.024	-0.011	-0.073	-0.013
TCRBV20_13	0.007	-0.018	-0.026	-0.003	0.010
TCRBV20_14	0.002	-0.011	-0.004	-0.005	-0.011

	46	47	48	49	50
TCRBV01_6	-0.014	-0.003	-0.023	-0.003	-0.020
TCRBV01_7	0.002	0.037	-0.012	-0.004	0.004
TCRBV01_8	0.008	0.016	-0.015	0.012	0.009
TCRBV01_9	0.010	-0.008	0.021	-0.048	-0.014
TCRBV01_10	-0.039	0.041	-0.006	-0.089	-0.003
TCRBV01_11	-0.017	-0.024	0.009	0.082	0.009
TCRBV01_12	0.024	0.000	-0.026	0.037	-0.015
TCRBV01_13	0.015	-0.022	0.017	0.016	0.001
TCRBV01_14	-0.001	0.002	0.001	0.000	-0.000
TCRBV02_6	-0.005	0.036	-0.004	-0.077	0.076
TCRBV02_7	0.016	-0.003	-0.002	-0.024	0.046
TCRBV02_8	0.042	-0.025	0.032	0.099	-0.019
TCRBV02_9	-0.043	0.005	-0.037	0.009	-0.084
TCRBV02_10	0.029	-0.029	-0.034	-0.016	-0.026

FIG. 115A

TCRBV02_11	-0.051	-0.007	-0.053	-0.033	-0.008
TCRBV02_12	0.003	-0.029	0.043	-0.010	-0.001
TCRBV02_13	0.004	0.011	-0.012	-0.001	-0.001
TCRBV03_4	0.000	0.001	0.002	0.001	0.000
TCRBV03_5	-0.010	0.001	0.001	-0.002	-0.001
TCRBV03_6	0.015	0.008	-0.095	0.047	-0.075
TCRBV03_7	-0.009	-0.004	0.002	-0.030	-0.015
TCRBV03_8	-0.022	-0.006	-0.014	0.009	0.028
TCRBV03_9	-0.003	0.002	0.005	-0.014	0.080
TCRBV03_10	0.045	0.043	0.057	-0.041	-0.032
TCRBV03_11	-0.030	0.029	0.033	0.022	0.010
TCRBV03_12	0.010	-0.013	-0.002	0.020	0.029
TCRBV03_13	-0.007	-0.022	-0.023	-0.011	-0.054
TCRBV04_6	0.012	0.006	0.003	0.002	-0.011
TCRBV04_7	0.001	0.045	0.030	-0.028	0.008
TCRBV04_8	0.024	0.016	-0.002	0.032	0.000
TCRBV04_9	0.017	-0.057	0.008	-0.030	0.019
TCRBV04_10	0.055	0.016	-0.019	-0.012	0.031
TCRBV04_11	-0.008	-0.028	-0.014	0.005	-0.040
TCRBV04_12	-0.021	-0.016	-0.038	0.104	0.022
TCRBV04_13	-0.077	0.027	0.028	-0.066	0.010
TCRBV04_14	0.001	0.021	0.008	0.011	-0.071
TCRBV04_15	-0.005	-0.030	-0.004	-0.019	0.033
TCRBV051_5	-0.021	-0.040	-0.010	0.040	0.014
TCRBV051_6	0.005	0.007	-0.050	-0.077	0.006
TCRBV051_7	-0.048	-0.005	0.070	0.019	-0.065
TCRBV051_8	-0.005	0.005	0.084	0.003	-0.018
TCRBV051_9	0.047	-0.065	-0.025	0.022	0.008
TCRBV051_10	-0.060	0.029	0.009	-0.012	0.007
TCRBV051_11	-0.028	-0.010	-0.031	-0.029	0.044
TCRBV051_12	0.036	0.031	-0.031	0.025	0.053
TCRBV051_13	0.022	-0.036	-0.019	0.024	0.024
TCRBV052_6	0.018	-0.005	0.014	-0.061	-0.002
TCRBV052_7	-0.018	-0.024	0.054	0.023	0.029
TCRBV052_8	0.006	0.007	-0.052	0.021	-0.010
TCRBV052_9	-0.039	0.003	-0.036	0.004	0.046
TCRBV052_10	-0.008	-0.035	0.027	-0.065	-0.017
TCRBV052_11	-0.031	-0.027	-0.019	0.049	-0.026
TCRBV052_12	0.001	-0.003	0.007	0.038	0.067
TCRBV052_13	0.020	0.001	0.001	0.007	-0.014
TCRBV06_5	0.009	0.007	-0.004	-0.008	-0.022
TCRBV06_6	0.006	0.007	-0.031	-0.022	0.006
TCRBV06_7	0.044	0.021	0.003	0.016	0.024
TCRBV06_8	-0.018	-0.007	0.006	0.003	0.000
TCRBV06_9	0.008	-0.020	-0.022	0.028	0.036
TCRBV06_10	0.053	-0.027	0.042	0.014	-0.028
TCRBV06_11	-0.010	0.012	-0.031	-0.017	0.037
TCRBV06_12	-0.085	0.045	-0.024	-0.023	-0.020
TCRBV06_13	-0.017	0.001	0.025	0.011	-0.063
TCRBV07_5	-0.000	-0.005	0.016	0.022	-0.041
TCRBV07_6	0.007	0.032	0.000	0.019	-0.019
TCRBV07_7	-0.012	0.017	-0.008	-0.067	-0.016
TCRBV07_8	0.050	-0.014	0.030	-0.044	0.066
TCRBV07_9	-0.023	0.006	-0.039	0.091	-0.011
TCRBV07_10	-0.001	-0.008	-0.052	-0.005	0.012
TCRBV07_11	-0.015	0.003	0.001	-0.028	0.032
TCRBV07_12	-0.001	0.006	0.018	0.023	-0.046
TCRBV07_13	-0.016	0.002	-0.001	-0.007	-0.005
TCRBV081_5	-0.006	-0.016	-0.013	-0.006	0.006
TCRBV081_6	-0.018	-0.001	0.013	-0.057	-0.077
TCRBV081_7	-0.021	-0.014	-0.001	0.004	0.007
TCRBV081_8	0.024	-0.038	-0.025	-0.002	0.013
TCRBV081_9	0.014	0.035	-0.053	0.026	0.041
TCRBV081_10	-0.021	-0.024	-0.024	0.017	0.027

FIG. 115B

TCRBV081_11	0.004	0.041	0.022	0.024	0.020
TCRBV081_12	0.024	0.017	0.081	-0.006	-0.035
TCRBV082_4	-0.009	-0.063	0.072	0.021	-0.001
TCRBV082_5	-0.033	0.022	0.009	-0.015	0.034
TCRBV082_6	-0.013	-0.026	0.070	0.018	0.100
TCRBV082_7	-0.033	0.026	-0.065	-0.053	-0.084
TCRBV082_8	-0.029	-0.003	-0.041	0.064	-0.041
TCRBV082_9	0.056	0.002	-0.016	-0.015	-0.005
TCRBV082_10	0.029	0.030	-0.033	-0.047	-0.014
TCRBV082_11	0.033	0.011	0.005	0.027	0.010
TCRBV083_4	-0.000	-0.002	-0.002	-0.001	-0.005
TCRBV083_5	0.006	0.013	0.069	0.050	0.031
TCRBV083_6	-0.023	-0.004	0.009	0.005	0.076
TCRBV083_7	-0.010	-0.027	-0.047	-0.007	-0.037
TCRBV083_8	-0.012	0.006	0.040	-0.042	0.006
TCRBV083_9	-0.015	0.007	-0.020	0.010	-0.056
TCRBV083_10	0.035	-0.029	0.045	-0.037	-0.040
TCRBV083_11	0.012	-0.027	-0.035	-0.043	0.054
TCRBV083_12	0.007	0.063	-0.058	0.065	-0.030
TCRBV09_5	0.010	0.005	-0.006	0.000	-0.005
TCRBV09_6	0.044	-0.002	-0.014	-0.055	0.031
TCRBV09_7	0.055	0.052	-0.051	-0.025	-0.053
TCRBV09_8	-0.034	0.032	-0.039	0.053	0.008
TCRBV09_9	-0.032	-0.048	-0.066	-0.053	0.063
TCRBV09_10	0.005	-0.062	0.047	-0.036	0.009
TCRBV09_11	0.021	-0.029	0.038	-0.010	-0.046
TCRBV09_12	0.004	-0.123	0.013	-0.005	-0.071
TCRBV09_13	-0.026	0.001	-0.007	0.014	-0.005
TCRBV09_14	0.018	0.011	-0.046	0.020	0.033
TCRBV09_15	0.003	0.032	-0.044	0.022	0.012
TCRBV10_6	-0.004	-0.017	0.048	-0.058	-0.014
TCRBV10_7	0.014	0.004	-0.039	-0.005	-0.086
TCRBV10_8	0.039	0.044	0.065	0.030	-0.026
TCRBV10_9	-0.067	0.016	-0.005	0.037	0.098
TCRBV10_10	0.003	-0.079	0.014	-0.059	0.027
TCRBV10_11	-0.004	0.014	-0.052	0.030	-0.012
TCRBV10_12	0.018	0.017	-0.032	0.025	0.012
TCRBV10_13	0.000	0.001	0.001	0.001	0.000
TCRBV11_5	-0.005	0.005	0.016	-0.018	-0.052
TCRBV11_6	0.002	-0.018	0.003	-0.039	-0.042
TCRBV11_7	0.004	-0.017	0.013	0.003	-0.053
TCRBV11_8	0.023	-0.008	0.010	0.006	0.085
TCRBV11_9	0.026	0.011	-0.060	0.062	-0.017
TCRBV11_10	-0.046	0.004	-0.041	-0.038	0.033
TCRBV11_11	-0.037	0.058	0.021	0.038	0.043
TCRBV11_12	0.021	-0.022	-0.000	-0.019	-0.028
TCRBV11_13	0.001	0.021	-0.001	0.002	0.002
TCRBV11_14	0.000	0.002	0.004	0.003	0.001
TCRBV11_15	0.000	0.001	0.001	0.001	0.000
TCRBV12_4	-0.011	0.018	0.014	0.002	0.026
TCRBV12_5	0.035	0.006	0.022	0.003	0.010
TCRBV12_6	0.016	0.007	-0.019	0.018	0.007
TCRBV12_7	-0.012	0.015	0.025	0.047	-0.023
TCRBV12_8	-0.000	0.016	0.074	0.068	0.001
TCRBV12_9	0.016	0.001	-0.104	0.012	-0.041
TCRBV12_10	-0.002	0.008	0.050	-0.035	0.057
TCRBV12_11	-0.014	-0.068	-0.027	-0.047	0.030
TCRBV12_12	-0.028	-0.003	-0.036	-0.067	-0.067
TCRBV13_5	0.007	-0.006	0.003	0.004	-0.003
TCRBV13_6	-0.041	-0.010	0.007	0.049	0.058
TCRBV13_7	-0.005	0.044	0.016	-0.039	-0.054
TCRBV13_8	-0.024	0.027	0.085	0.021	-0.044
TCRBV13_9	0.021	0.021	0.015	0.006	0.044

FIG. 115C

TCRBV13_10	0.025	-0.006	-0.061	-0.018	-0.042
TCRBV13_11	0.019	-0.040	-0.045	0.021	0.018
TCRBV13_12	0.001	-0.006	-0.012	0.016	0.002
TCRBV13_13	-0.003	-0.024	-0.009	-0.059	0.022
TCRBV14_5	0.001	-0.006	-0.002	0.001	0.010
TCRBV14_6	0.028	-0.008	0.046	0.011	-0.040
TCRBV14_7	-0.041	0.028	-0.029	-0.014	0.015
TCRBV14_8	-0.046	0.009	0.021	-0.014	0.024
TCRBV14_9	0.008	-0.111	-0.043	-0.066	0.011
TCRBV14_10	-0.048	0.004	-0.006	0.084	-0.018
TCRBV14_11	0.085	0.049	0.017	0.024	-0.008
TCRBV14_12	0.013	0.032	-0.006	-0.026	0.007
TCRBV14_13	0.001	0.002	0.001	0.001	-0.001
TCRBV15_4	0.003	0.015	-0.011	-0.006	0.007
TCRBV15_5	-0.006	-0.029	-0.035	-0.025	-0.068
TCRBV15_6	-0.009	0.039	-0.004	0.023	-0.047
TCRBV15_7	0.008	0.046	-0.055	-0.020	0.079
TCRBV15_8	-0.015	0.002	0.017	0.036	-0.031
TCRBV15_9	-0.020	-0.040	0.039	0.010	0.015
TCRBV15_10	0.010	-0.014	0.014	0.036	0.042
TCRBV15_11	0.041	0.016	-0.007	-0.047	-0.050
TCRBV15_12	-0.023	0.003	0.007	-0.005	0.025
TCRBV16_5	0.005	0.018	0.007	-0.056	0.049
TCRBV16_6	0.021	-0.006	0.001	0.025	0.083
TCRBV16_7	-0.020	-0.102	-0.058	0.001	-0.017
TCRBV16_8	-0.028	0.010	0.002	0.006	-0.064
TCRBV16_9	-0.008	0.004	0.001	0.002	0.014
TCRBV16_10	-0.020	0.047	-0.008	0.011	-0.032
TCRBV16_11	-0.026	0.044	0.047	-0.004	-0.001
TCRBV16_12	0.006	-0.049	-0.032	0.025	-0.005
TCRBV16_13	0.007	-0.011	0.001	0.007	0.018
TCRBV18_3	0.004	-0.007	0.000	-0.005	-0.006
TCRBV18_4	0.048	-0.024	0.044	-0.043	0.000
TCRBV18_5	0.050	-0.002	-0.013	0.049	0.045
TCRBV18_6	0.045	0.068	0.008	-0.047	-0.032
TCRBV18_7	-0.122	-0.018	0.030	0.007	-0.003
TCRBV18_8	0.047	0.053	0.013	-0.067	0.004
TCRBV18_9	-0.035	-0.049	0.001	0.011	-0.023
TCRBV18_10	-0.031	-0.035	0.067	0.012	-0.086
TCRBV18_11	-0.023	-0.006	0.032	0.022	-0.019
TCRBV18_12	-0.002	0.001	0.002	-0.001	0.010
TCRBV18_13	-0.009	-0.013	-0.007	-0.004	0.006
TCRBV20_5	0.000	0.030	0.023	-0.006	-0.059
TCRBV20_6	-0.024	0.035	0.000	0.053	0.015
TCRBV20_7	-0.042	0.009	0.018	-0.027	0.031
TCRBV20_8	-0.012	0.049	-0.028	-0.050	-0.060
TCRBV20_9	0.047	-0.058	0.006	0.106	-0.030
TCRBV20_10	-0.032	-0.027	-0.006	-0.041	0.004
TCRBV20_11	0.023	-0.016	0.011	-0.012	-0.042
TCRBV20_12	0.023	0.039	-0.012	-0.027	0.091
TCRBV20_13	0.004	-0.035	-0.039	0.010	0.016
TCRBV20_14	0.002	0.012	-0.009	-0.005	0.006

	51	52
TCRBV01_6	0.005	0.001
TCRBV01_7	-0.006	-0.031
TCRBV01_8	-0.041	0.095
TCRBV01_9	-0.033	-0.074
TCRBV01_10	0.023	0.004
TCRBV01_11	-0.031	-0.003
TCRBV01_12	0.061	-0.024
TCRBV01_13	0.013	0.015
TCRBV01_14	-0.001	-0.001

FIG. 115D

TCRBV02_6	0.046	-0.048
TCRBV02_7	-0.037	-0.026
TCRBV02_8	-0.145	0.046
TCRBV02_9	0.013	0.004
TCRBV02_10	-0.005	-0.031
TCRBV02_11	-0.009	-0.017
TCRBV02_12	-0.016	-0.055
TCRBV02_13	0.001	-0.016
TCRBV03_4	0.004	0.004
TCRBV03_5	-0.004	0.007
TCRBV03_6	-0.016	-0.040
TCRBV03_7	0.029	-0.066
TCRBV03_8	0.031	0.020
TCRBV03_9	0.014	0.036
TCRBV03_10	-0.011	-0.047
TCRBV03_11	-0.033	0.022
TCRBV03_12	-0.010	-0.010
TCRBV03_13	-0.014	0.054
TCRBV04_6	-0.011	0.006
TCRBV04_7	-0.018	-0.073
TCRBV04_8	0.047	-0.036
TCRBV04_9	-0.004	-0.211
TCRBV04_10	-0.047	0.160
TCRBV04_11	0.051	0.048
TCRBV04_12	-0.024	0.043
TCRBV04_13	-0.053	0.022
TCRBV04_14	0.066	0.002
TCRBV04_15	-0.007	0.039
TCRBV051_5	-0.065	-0.049
TCRBV051_6	-0.039	-0.035
TCRBV051_7	-0.027	-0.083
TCRBV051_8	-0.005	0.041
TCRBV051_9	0.034	0.030
TCRBV051_10	-0.058	0.050
TCRBV051_11	0.055	0.073
TCRBV051_12	0.042	-0.006
TCRBV051_13	0.058	0.027
TCRBV052_6	-0.014	-0.102
TCRBV052_7	0.018	0.036
TCRBV052_8	0.000	0.045
TCRBV052_9	0.042	0.045
TCRBV052_10	0.020	0.055
TCRBV052_11	-0.012	-0.030
TCRBV052_12	-0.036	-0.015
TCRBV052_13	-0.024	0.016
TCRBV06_5	-0.025	-0.013
TCRBV06_6	-0.014	-0.034
TCRBV06_7	-0.060	-0.039
TCRBV06_8	0.084	0.001
TCRBV06_9	-0.054	-0.049
TCRBV06_10	0.011	0.063
TCRBV06_11	0.015	-0.009
TCRBV06_12	-0.003	0.021
TCRBV06_13	0.036	0.039
TCRBV07_5	0.001	-0.032
TCRBV07_6	0.007	-0.050
TCRBV07_7	-0.025	-0.006
TCRBV07_8	0.023	0.044
TCRBV07_9	-0.038	-0.054
TCRBV07_10	0.073	0.054
TCRBV07_11	-0.008	0.067
TCRBV07_12	-0.029	-0.046
TCRBV07_13	-0.014	0.003
TCRBV081_5	0.020	0.006

FIG. 116A

TCRBV081_6	-0.014	0.043
TCRBV081_7	0.006	0.034
TCRBV081_8	-0.028	-0.034
TCRBV081_9	-0.008	-0.039
TCRBV081_10	0.004	0.040
TCRBV081_11	-0.013	0.012
TCRBV081_12	0.033	-0.062
TCRBV082_4	0.103	-0.021
TCRBV082_5	-0.054	-0.020
TCRBV082_6	0.101	-0.007
TCRBV082_7	-0.086	0.107
TCRBV082_8	0.013	-0.019
TCRBV082_9	-0.050	0.023
TCRBV082_10	-0.033	-0.055
TCRBV082_11	0.006	-0.009
TCRBV083_4	-0.001	0.004
TCRBV083_5	-0.020	-0.000
TCRBV083_6	-0.047	-0.001
TCRBV083_7	0.059	0.043
TCRBV083_8	-0.098	0.001
TCRBV083_9	0.052	0.013
TCRBV083_10	0.062	-0.018
TCRBV083_11	-0.052	0.017
TCRBV083_12	0.044	-0.058
TCRBV09_5	0.011	0.003
TCRBV09_6	0.022	0.052
TCRBV09_7	-0.055	0.091
TCRBV09_8	0.050	-0.010
TCRBV09_9	0.001	-0.032
TCRBV09_10	0.025	-0.007
TCRBV09_11	0.043	0.004
TCRBV09_12	0.004	-0.125
TCRBV09_13	-0.083	-0.060
TCRBV09_14	-0.079	0.009
TCRBV09_15	-0.009	-0.023
TCRBV10_6	-0.004	-0.022
TCRBV10_7	-0.026	-0.011
TCRBV10_8	0.002	-0.074
TCRBV10_9	0.008	0.041
TCRBV10_10	-0.045	0.092
TCRBV10_11	0.028	-0.027
TCRBV10_12	0.035	-0.001
TCRBV10_13	0.002	0.002
TCRBV11_5	0.012	0.022
TCRBV11_6	0.032	0.015
TCRBV11_7	-0.045	0.092
TCRBV11_8	-0.087	-0.067
TCRBV11_9	0.058	-0.057
TCRBV11_10	-0.034	0.013
TCRBV11_11	0.028	-0.071
TCRBV11_12	0.006	0.022
TCRBV11_13	0.008	-0.000
TCRBV11_14	0.009	0.008
TCRBV11_15	0.003	0.003
TCRBV12_4	-0.047	-0.033
TCRBV12_5	0.023	0.054
TCRBV12_6	-0.034	-0.007
TCRBV12_7	-0.007	0.118
TCRBV12_8	0.045	0.008
TCRBV12_9	0.039	-0.101
TCRBV12_10	0.000	-0.021
TCRBV12_11	-0.041	-0.037
TCRBV12_12	0.021	0.021
TCRBV13_5	0.022	-0.015

FIG. 116B

TCRBV13_6	-0.092	-0.029
TCRBV13_7	0.026	-0.025
TCRBV13_8	-0.000	0.059
TCRBV13_9	0.018	-0.032
TCRBV13_10	0.052	-0.005
TCRBV13_11	0.019	0.095
TCRBV13_12	0.004	0.015
TCRBV13_13	-0.049	-0.062
TCRBV14_5	-0.001	0.008
TCRBV14_6	-0.057	-0.008
TCRBV14_7	0.025	-0.026
TCRBV14_8	0.031	-0.010
TCRBV14_9	0.008	0.011
TCRBV14_10	0.024	-0.017
TCRBV14_11	-0.078	0.052
TCRBV14_12	0.044	-0.011
TCRBV14_13	0.002	0.001
TCRBV15_4	0.009	-0.022
TCRBV15_5	-0.035	-0.067
TCRBV15_6	-0.002	-0.026
TCRBV15_7	0.072	0.028
TCRBV15_8	0.017	0.013
TCRBV15_9	0.023	0.006
TCRBV15_10	-0.028	0.080
TCRBV15_11	-0.049	-0.040
TCRBV15_12	-0.016	0.008
TCRBV16_5	0.079	0.016
TCRBV16_6	0.007	0.014
TCRBV16_7	-0.070	0.070
TCRBV16_8	-0.002	-0.030
TCRBV16_9	0.030	0.025
TCRBV16_10	-0.079	-0.041
TCRBV16_11	-0.016	0.044
TCRBV16_12	0.034	-0.070
TCRBV16_13	0.002	0.001
TCRBV18_3	0.003	0.009
TCRBV18_4	-0.018	0.015
TCRBV18_5	-0.019	0.010
TCRBV18_6	0.012	-0.028
TCRBV18_7	0.036	-0.045
TCRBV18_8	0.011	-0.001
TCRBV18_9	-0.069	-0.013
TCRBV18_10	-0.003	-0.006
TCRBV18_11	0.023	0.099
TCRBV18_12	0.002	0.001
TCRBV18_13	0.009	0.002
TCRBV20_5	0.028	0.033
TCRBV20_6	-0.063	0.010
TCRBV20_7	-0.062	-0.056
TCRBV20_8	0.022	0.084
TCRBV20_9	0.041	0.027
TCRBV20_10	-0.008	0.044
TCRBV20_11	-0.018	0.003
TCRBV20_12	0.051	-0.065
TCRBV20_13	-0.008	-0.083
TCRBV20_14	0.007	-0.018

Standardized scores have been saved.

FIG. 116C

53 cases and 56 variables processed.

53 cases and 56 variables processed and saved.

SYSTAT Rectangular file C:\Utilisateurs\OGp8586\Pr81OG290802F.SYD,
created Fri Aug 30, 2002 at 10:39:56, contains variables:

CASE$ GROUPS$ FACTOR(1.. 52) TSQUARE PROB

Group frequencies

F3*	F3*S	FS	FT	R3*	R3*6
5	10	5	9	5	5

RS	RT
5	9

Group means

FIG. 116D

	F3*	F3*S	FS	FT	R3*
FACTOR(1)	-0.029	-0.701	0.789	-0.582	0.556
FACTOR(2)	-0.652	-0.065	-0.584	-0.647	0.976
FACTOR(3)	0.667	1.285	0.110	-1.234	-0.470
FACTOR(4)	0.561	-0.170	0.972	-0.038	-0.367
FACTOR(5)	0.448	-0.469	0.382	-0.026	0.202
FACTOR(6)	0.282	0.126	0.420	0.215	-0.546
FACTOR(7)	1.267	0.083	-1.236	0.401	0.114
FACTOR(8)	-0.530	0.072	-0.258	0.292	0.206
FACTOR(9)	-0.147	-0.371	0.124	0.115	-0.221
FACTOR(10)	-0.446	-0.130	0.019	0.225	-0.179
FACTOR(11)	0.434	-0.536	-0.076	-0.120	0.001
FACTOR(12)	0.838	-0.514	0.022	0.420	0.207
FACTOR(13)	-0.646	0.161	0.450	0.386	-0.429
FACTOR(14)	0.638	-0.370	-0.210	-0.257	0.209
FACTOR(15)	0.285	0.143	0.430	-0.321	-0.217
FACTOR(16)	-0.020	-0.127	-0.144	0.214	-0.111
FACTOR(17)	-0.458	0.427	-0.945	-0.293	-0.113
FACTOR(18)	-0.852	0.271	0.435	-0.086	-0.474
FACTOR(19)	0.220	0.034	0.055	0.041	0.340
FACTOR(20)	1.027	0.179	-0.153	0.135	-0.054
FACTOR(21)	-0.859	0.332	0.320	0.713	-0.432
FACTOR(22)	-0.048	-0.018	-0.247	0.248	-0.226
FACTOR(23)	-0.449	-0.240	0.032	0.287	0.081
FACTOR(24)	0.266	-0.323	0.359	-0.043	-0.658
FACTOR(25)	-0.225	-0.194	0.171	-0.156	0.045
FACTOR(26)	-0.255	0.234	-0.829	0.240	-0.231
FACTOR(27)	0.389	-0.260	-1.069	0.080	0.075
FACTOR(28)	-0.222	0.080	0.055	0.027	-0.197
FACTOR(29)	-0.112	0.030	-0.050	0.070	0.004
FACTOR(30)	-0.439	0.142	0.005	0.129	0.584
FACTOR(31)	-0.104	-0.046	0.218	-0.406	-0.123

FIG. 117A

FACTOR(32)	0.258	-0.046	-0.316	0.063	-1.439
FACTOR(33)	0.041	-0.090	-0.323	0.189	-0.732
FACTOR(34)	0.160	-0.126	-0.199	-0.061	-0.107
FACTOR(35)	-0.200	0.051	-0.141	0.027	0.027
FACTOR(36)	-0.040	0.019	-0.167	-0.220	-0.329
FACTOR(37)	0.266	0.042	0.087	-0.328	0.063
FACTOR(38)	0.129	-0.118	0.184	0.001	-0.584
FACTOR(39)	0.298	-0.086	0.173	-0.194	-0.728
FACTOR(40)	-0.189	0.049	-0.152	0.209	-0.352
FACTOR(41)	0.042	0.030	-0.129	0.138	-0.684
FACTOR(42)	0.011	0.067	-0.343	-0.103	0.266
FACTOR(43)	0.153	-0.138	-0.118	0.038	-0.640
FACTOR(44)	0.155	0.034	-0.690	-0.037	-0.356
FACTOR(45)	0.012	-0.073	-0.015	-0.330	0.208
FACTOR(46)	-0.062	0.018	0.155	0.159	-0.302
FACTOR(47)	-0.167	0.099	-0.789	0.315	0.361
FACTOR(48)	-0.118	0.087	-0.168	-0.011	0.483
FACTOR(49)	-0.089	0.106	-0.313	-0.013	-0.045
FACTOR(50)	-0.119	0.150	0.091	-0.073	0.446
FACTOR(51)	0.007	0.003	0.045	-0.079	0.084
FACTOR(52)	-0.029	0.052	-0.016	-0.018	-0.047

FIG. 117B

	R3*S	RS	RT
FACTOR(1)	0.148	0.985	0.001
FACTOR(2)	1.046	-0.140	0.360
FACTOR(3)	-0.172	-0.043	-0.244
FACTOR(4)	-0.615	-0.068	-0.042
FACTOR(5)	-0.607	0.022	0.299
FACTOR(6)	-0.309	-0.314	-0.096
FACTOR(7)	-0.164	-0.524	-0.192
FACTOR(8)	-0.025	-0.459	0.220
FACTOR(9)	0.265	0.167	0.193
FACTOR(10)	-0.314	0.271	0.280
FACTOR(11)	0.188	0.331	0.227
FACTOR(12)	0.155	-0.396	-0.307
FACTOR(13)	-0.476	0.237	-0.084
FACTOR(14)	-0.277	-0.134	0.542
FACTOR(15)	0.270	-0.092	-0.214
FACTOR(16)	-0.023	0.052	0.064
FACTOR(17)	0.138	0.312	0.411
FACTOR(18)	0.242	0.215	0.026
FACTOR(19)	-0.009	-0.225	-0.291
FACTOR(20)	0.029	0.037	-0.827
FACTOR(21)	-0.537	0.109	-0.306
FACTOR(22)	0.789	-0.804	0.070
FACTOR(23)	0.221	-0.249	0.182
FACTOR(24)	0.514	1.032	-0.438
FACTOR(25)	0.736	0.117	-0.097
FACTOR(26)	0.414	0.061	-0.033
FACTOR(27)	0.108	0.861	0.006
FACTOR(28)	-0.339	-0.197	0.384
FACTOR(29)	-0.052	0.647	-0.346
FACTOR(30)	-0.066	0.027	-0.348
FACTOR(31)	0.411	0.428	-0.004

FIG. 117C

FACTOR(32)	-0.004	-0.005	0.825
FACTOR(33)	0.536	0.789	-0.262
FACTOR(34)	-0.303	0.558	0.141
FACTOR(35)	-0.098	0.631	-0.205
FACTOR(36)	0.504	0.050	0.190
FACTOR(37)	-0.869	0.411	0.303
FACTOR(38)	0.522	-0.456	0.244
FACTOR(39)	0.200	-0.491	0.594
FACTOR(40)	-0.598	0.229	0.326
FACTOR(41)	0.218	0.412	-0.093
FACTOR(42)	-0.426	0.774	-0.128
FACTOR(43)	0.417	0.074	0.178
FACTOR(44)	-0.184	0.661	0.229
FACTOR(45)	-0.159	0.031	0.367
FACTOR(46)	0.675	-0.075	-0.396
FACTOR(47)	-0.667	0.562	-0.035
FACTOR(48)	-0.257	-0.406	0.174
FACTOR(49)	0.012	0.514	-0.149
FACTOR(50)	-0.219	-0.128	-0.133
FACTOR(51)	-0.963	0.123	0.466
FACTOR(52)	-0.107	0.082	0.025

FIG. 117D

Between groups F-matrix -- df = 45 1

	F3*	F3*S	FS	FT	R3*
F3*	0.000				
F3*S	52.367	0.000			
FS	26.426	63.091	0.000		
FT	29.544	34.464	10.096	0.000	
R3*	18.757	47.604	2.035	5.200	0.000
R3*S	26.437	14.504	14.702	1.906	8.656
RS	22.784	65.376	0.588	11.754	2.046
RT	41.861	13.667	27.023	6.505	18.275

	R3*S	RS	RT
R3*S	0.00 0		
RS	15.9 21	0.00 0	
RT	1.02 4	29.4 65	0.00 0

Wilks' lambda
Lambda = 0.0000 df = 45 7 45
Approx. F= 5.2756 df = 315 20 prob = 0.0000

Classification functions

	F3*	F3*S	FS	FT	R3*
CONSTANT	-7356.799	-5637.861	-4201.980	-306.080	-2116.499

	R3*S	RS	RT
CONSTANT	-427.721	-4460.284	-1225.056

FIG. 118A

FACTOR(1)	5.325 88	-3336.155	32.243 28	9.611 37	94.506 19
FACTOR(2)	-1189.608	0.078 64	-482.200	.800 53	-357.182
FACTOR(3)	3.254 73	54.265 29	-2573.948	-619.584	-1742.564
FACTOR(4)	03.939 11	-1214.829	0.686 98	.868 34	6.431 71
FACTOR(5)	0.353 91	-1522.227	22.642 12	6.464 11	9.387 90
FACTOR(6)	8.258 28	5.952 29	-265.061	-80.595	-187.563
FACTOR(7)	19.786 16	96.056 10	-1193.107	-387.205	-625.109
FACTOR(8)	-1140.457	7.611 90	-691.194	.196 33	-544.344
FACTOR(9)	-249.941	-743.279	1.489 66	9.031 15	9.891 42
FACTOR(10)	-719.913	-227.624	8.814 27	5.837 14	6.473 11
FACTOR(11)	0.282 79	-1311.675	30.215 10	.504 94	3.396 78
FACTOR(12)	97.052 14	-1420.478	38.720 10	.468 29	2.841 86
FACTOR(13)	-895.490	-47.340	1.539 18	1.537 14	0. 971
FACTOR(14)	6.867 81	-413.070	4.639 23	-49.142	6.640 25
FACTOR(15)	2.076 48	.884 46	-67.783	-88.142	-23.844
FACTOR(16)	-81.496	-130.719	0.991 11	.778 39	.874 71
FACTOR(17)	-1191.607	57.059 20	-1679.725	-166.411	-1231.019
FACTOR(18)	-1417.776	6.412 61	-343.838	.728 96	-391.897
FACTOR(19)	5.084 52	-254.610	4.486 16	-33.702	6.883 16
FACTOR(20)	52.578 19	-354.785	0.301 11	-225.896	3.415 23
FACTOR(21)	-1234.827	9.534 37	-151.066	0.150 13	-255.522
FACTOR(22)	-666.088	07.799 12	-1022.400	-80.786	-720.577
FACTOR(23)	-833.821	-153.721	1.197 20	6.884 15	.376 83
FACTOR(24)	1.573 94	-1846.576	37.538 15	5.061 14	85.487 10
FACTOR(25)	-242.956	-560.933	8.925 50	7.562 11	4.727 33
FACTOR(26)	-745.639	98.794 13	-1164.052	-110.083	-838.579
FACTOR(27)	8.920 77	-569.483	2.121 37	-23.140	5.486 34
FACTOR(28)	-657.807	9.621 69	-536.667	-11.767	-429.010
FACTOR(29)	2.459 25	-729.338	9.608 62	.267 72	2.399 43
FACTOR(30)	-329.901	-254.889	7.568 26	.791 86	2.336 16
FACTOR(31)	-15.784	425.790 38	8.537	.283 53	0.897 25
FACTOR(32)	-	15	-	-	-

FIG. 118B

FACTOR(1)	-516.421	-71.510	-1210.085
FACTOR(2)	32.374	-595.120	51.744
FACTOR(3)	15.068	-2501.821	62.296
FACTOR(4)	-353.442	-96.718	-654.132
FACTOR(5)	-328.479	-31.529	-672.563
FACTOR(6)	-37.733	-251.033	3.499
FACTOR(7)	-152.418	-1010.654	-74.246
FACTOR(8)	30.949	-835.407	57.266
FACTOR(9)	-28.284	-2.608	-141.922
FACTOR(10)	10.762	-19.379	12.348
FACTOR(11)	-267.696	-44.530	-570.825
FACTOR(12)	-410.379	-11.799	-784.511
FACTOR(13)	12.889	-62.525	20.266
FACTOR(14)	-174.147	-0.427	-311.017
FACTOR(15)	-89.587	-14.115	-123.256
FACTOR(16)	3.673	-3.078	-10.157
FACTOR(17)	44.489	-1806.603	91.382
FACTOR(18)	30.935	-512.894	52.741
FACTOR(19)	-122.409	-9.704	-213.257
FACTOR(20)	-397.324	-3.055	-619.912
FACTOR(21)	23.744	-320.278	40.228
FACTOR(22)	26.874	-1108.931	54.411
FACTOR(23)	14.105	-2.272	18.290
FACTOR(24)	-376.504	-72.559	-793.673
FACTOR(25)	-7.187	-3.777	-98.351
FACTOR(26)	29.676	-1247.184	61.743
FACTOR(27)	-180.161	-4.691	-350.244
FACTOR(28)	18.587	-622.211	37.693
FACTOR(29)	-132.213	-8.456	-290.064
FACTOR(30)	27.545	-4.265	0.968
FACTOR(31)	-42.314	-2.739	-126.892
FACTOR(32)	27	-	63

FIG. 118C

	569.927	89.968	1341.629	161.012	986.491
FACTOR(33)	1.128E-15	-325.268	0.719E-27	.473E-26	5.808E-1
FACTOR(34)	1.097E-39	-532.880	3.931E-42	.130E-24	2.562E-3
FACTOR(35)	.879E-21	-479.666	2.451E-43	.599E-65	2.397E-2
FACTOR(36)	-357.451	1.311E-63	-521.910	-54.706	-382.198
FACTOR(37)	9.876E-56	-338.182	6.025E-25	-38.478	-1.471E-2
FACTOR(38)	-297.185	6.832E-59	-503.345	-45.380	-367.606
FACTOR(39)	-243.396	9.287E-98	-850.458	-117.629	-604.867
FACTOR(40)	-465.488	1.992E-38	-275.887	-.571E-12	-246.707
FACTOR(41)	-14.506	9.792E-15	-128.126	-24.143	-112.574
FACTOR(42)	1.848E-44	-579.365	0.909E-47	.485E-17	0.317E-3
FACTOR(43)	-83.053	5.618E-28	-253.243	-30.550	-184.865
FACTOR(44)	2.862E-12	5.119E-39	-367.181	-84.781	-244.696
FACTOR(45)	0.000	0.000	0.000	0.000	0.000
FACTOR(46)	0.000	0.000	0.000	0.000	0.000
FACTOR(47)	0.000	0.000	0.000	0.000	0.000
FACTOR(48)	-306.610	1.311E-52	-437.054	-34.115	-299.483
FACTOR(49)	0.000	0.000	0.000	0.000	0.000
FACTOR(50)	0.000	0.000	0.000	0.000	0.000
FACTOR(51)	0.000	0.000	0.000	0.000	0.000
FACTOR(52)	0.000	0.000	0.000	0.000	0.000

FIG. 118D

	7.822	1405.922	1.130
FACTOR(33)	-61.258	30 7.829	- 134.079
FACTOR(34)	-128.043	48 2.732	- 255.530
FACTOR(35)	-61.517	44 5.127	- 155.045
FACTOR(36)	14 1.801	- 553.931	28 3.078
FACTOR(37)	-149.909	32 6.269	- 254.505
FACTOR(38)	12 4.734	- 541.574	26 2.776
FACTOR(39)	15 6.442	- 883.045	36 5.823
FACTOR(40)	11 6.478	- 333.909	23 2.723
FACTOR(41)	15 .342	- 123.246	48 .324
FACTOR(42)	-146.187	53 6.520	- 292.306
FACTOR(43)	52 .637	- 255.160	11 5.244
FACTOR(44)	25 .751	- 335.940	89 .762
FACTOR(45)	0. 000	0. 000	0. 000
FACTOR(46)	0. 000	0. 000	0. 000
FACTOR(47)	0. 000	0. 000	0. 000
FACTOR(48)	11 6.883	- 481.245	23 6.830
FACTOR(49)	0. 000	0. 000	0. 000
FACTOR(50)	0. 000	0. 000	0. 000
FACTOR(51)	0. 000	0. 000	0. 000
FACTOR(52)	0. 000	0. 000	0. 000

Variable	F-to-remove	Tolerance
3 FACTOR(1)	165.86	0.001301
4 FACTOR(2)	20.89	0.010747
5 FACTOR(3)	155.48	0.002697
6 FACTOR(4)	30.37	0.005689
7 FACTOR(5)	37.26	0.004393
8 FACTOR(6)	3.26	0.045888
9 FACTOR(7)	62.50	0.003602
10 FACTOR(8)	22.54	0.006860
11 FACTOR(9)	10.46	0.014231
12 FACTOR(10)	8.04	0.018656
13 FACTOR(11)	27.69	0.005697
14 FACTOR(12)	44.93	0.003898
15 FACTOR(13)	10.57	0.015446
16 FACTOR(14)	8.78	0.018728
17 FACTOR(15)	3.21	0.045731
18 FACTOR(16)	0.48	0.232616
19 FACTOR(17)	68.14	0.002608
20 FACTOR(18)	24.62	0.006671
21 FACTOR(19)	3.57	0.039938
22 FACTOR(20)	43.13	0.004298

Variable	F-to-enter	Tolerance
47 FACTOR(45)	0.00	0.000000
48 FACTOR(46)	0.00	0.000000
49 FACTOR(47)	0.00	0.000000
51 FACTOR(49)	0.00	0.000000
52 FACTOR(50)	0.00	0.000000
53 FACTOR(51)	0.00	0.000000
54 FACTOR(52)	0.00	0.000000

FIG. 119A

23	FACTOR(21)	18.37	0.010330
24	FACTOR(22)	24.41	0.006799
25	FACTOR(23)	9.65	0.015550
26	FACTOR(24)	54.39	0.003457
27	FACTOR(25)	6.53	0.023139
28	FACTOR(26)	31.22	0.005147
29	FACTOR(27)	9.95	0.017948
30	FACTOR(28)	10.02	0.014805
31	FACTOR(29)	8.36	0.017939
32	FACTOR(30)	3.06	0.048530
33	FACTOR(31)	3.36	0.043854
34	FACTOR(32)	39.28	0.005440
35	FACTOR(33)	2.08	0.077397
36	FACTOR(34)	5.09	0.028857
37	FACTOR(35)	3.83	0.037992
38	FACTOR(36)	6.56	0.022503
39	FACTOR(37)	4.86	0.032875
40	FACTOR(38)	5.88	0.026270
41	FACTOR(39)	15.03	0.011187
42	FACTOR(40)	3.95	0.038036
43	FACTOR(41)	0.65	0.194654
44	FACTOR(42)	6.37	0.024341
45	FACTOR(43)	1.50	0.093363
46	FACTOR(44)	3.21	0.048085
50	FACTOR(48)	4.69	0.031305

Classification matrix (cases in row categories classified into columns)

	F3*	F3*:	FS	FT	R3*	R3*:
F3*	5	0	0	0	0	0
F3*:	0	10	0	0	0	0
FS	0	0	5	0	0	0
FT	0	0	0	9	0	0
R3*	0	0	0	0	5	0
R3*:	0	0	0	0	0	5
RS	0	0	0	0	0	0
RT	0	0	0	0	0	0
Total	5	10	5	9	5	5

FIG. 119B

	RS	RT	%correct
F3*	0	0	100
F3*:	0	0	100
FS	0	0	100
FT	0	0	100
R3*	0	0	100
R3*:	0	0	100
RS	5	0	100
RT	0	9	100
Total	5	9	100

Jackknifed classification matrix

	F3*	F3*:	FS	FT	R3*	R3*:
F3*	4	0	0	1	0	0
F3*:	2	3	3	0	1	0
FS	1	1	0	0	0	0
FT	3	0	4	1	0	0
R3*	2	0	0	1	0	1
R3*:	3	1	1	0	0	0
RS	0	3	1	0	0	0
RT	2	1	2	0	0	1
Total	17	9	11	3	1	2

	RS	RT	%correct
F3*	0	0	80
F3*:	1	0	30
FS	1	2	0
FT	0	1	11
R3*	1	0	0
R3*:	0	0	0
RS	1	0	20
RT	1	2	22
Total	5	5	21

FIG. 119C

Eigenvalues

5277.370	1800.188	87.172	38.636	26.920	5.759

2.402

Canonical correlations

1.000	1.000	0.994	0.987	0.982	0.923

0.840

Cumulative proportion of total dispersion

0.729	0.978	0.990	0.995	0.999	1.000

1.000

Wilks' lambda= 0.000
Approx.F= 5.299 df= 315, 20 p-tail= 0.0000

Pillai's trace= 6.485
Approx.F= 1.959 df= 315, 49 p-tail= 0.0026

Lawley-Hotelling trace= 7238.447
Approx.F= -16.414 df= 315, -5 p-tail=

Canonical discriminant functions

	1	2	3	4	5
Constant	0.000	0.000	0.000	0.000	0.000

	6	7
Constant	0.000	0.000

FIG. 119D

FACTOR(1)	31.378	4.071	0.964	1.632	0.309
FACTOR(2)	-7.334	7.746	-1.991	2.984	-0.441
FACTOR(3)	-25.539	-16.382	4.358	1.598	-0.365
FACTOR(4)	12.422	-5.058	1.504	-1.287	0.059
FACTOR(5)	14.807	-2.371	-0.543	-0.511	0.154
FACTOR(6)	-2.286	-3.427	0.861	-1.432	0.042
FACTOR(7)	-8.310	-17.352	-2.845	-0.636	-0.059
FACTOR(8)	-9.658	6.439	-1.233	-0.388	-0.451
FACTOR(9)	6.376	4.672	-0.584	-0.123	0.724
FACTOR(10)	1.220	6.832	0.108	-0.530	0.487
FACTOR(11)	12.693	-2.092	-1.113	0.482	0.919
FACTOR(12)	14.435	-7.638	-2.155	-0.913	-0.241
FACTOR(13)	-0.462	7.678	1.776	-1.334	0.010
FACTOR(14)	4.535	-5.414	-1.623	0.360	0.522
FACTOR(15)	0.244	-4.213	1.198	0.286	-0.087
FACTOR(16)	1.031	1.143	-0.552	-0.376	0.310
FACTOR(17)	-20.055	2.888	-0.016	1.330	0.685
FACTOR(18)	-7.071	9.757	1.984	0.048	0.240
FACTOR(19)	2.921	-3.531	-0.248	-0.048	-0.755
FACTOR(20)	5.545	-15.158	0.467	-0.403	-0.437
FACTOR(21)	-4.720	9.052	1.757	-1.940	-0.405
FACTOR(22)	-11.909	1.432	-1.953	-0.315	0.021
FACTOR(23)	0.313	7.533	-1.230	-0.361	-0.032
FACTOR(24)	17.959	-1.525	1.660	0.241	1.311
FACTOR(25)	4.791	3.968	-0.176	0.842	0.160
FACTOR(26)	-13.635	1.429	-0.821	0.216	0.429
FACTOR(27)	5.934	-4.565	-1.317	0.909	1.138
FACTOR(28)	-7.117	3.111	0.071	-0.492	0.192
FACTOR(29)	7.008	0.390	1.073	0.199	0.103
FACTOR(30)	1.986	3.631	0.223	0.204	-1.108
FACTOR(31)	3.927	1.592	1.020	1.068	0.483
FACTOR(32)					

FIG. 120A

	-15.192	-0.671	-0.273	-0.961	2.409
FACTOR(33)	3.145	-0.139	0.605	0.076	1.399
FACTOR(34)	5.297	-1.439	0.298	0.187	0.718
FACTOR(35)	4.460	1.463	0.925	0.326	0.175
FACTOR(36)	-6.171	0.821	-0.119	0.662	0.723
FACTOR(37)	3.825	-3.616	1.157	0.154	0.269
FACTOR(38)	-5.844	0.449	-0.643	-0.382	0.689
FACTOR(39)	-9.343	-1.352	-0.496	-0.381	1.064
FACTOR(40)	-3.996	2.597	0.373	-0.798	0.618
FACTOR(41)	-1.432	-0.422	0.716	-0.307	1.015
FACTOR(42)	5.851	-1.719	0.850	0.639	0.111
FACTOR(43)	-2.754	-0.275	-0.342	-0.141	1.145
FACTOR(44)	-3.465	-2.389	0.077	0.375	1.222
FACTOR(45)	.	.	.	.	.
FACTOR(46)	.	.	.	.	.
FACTOR(47)	.	.	.	.	.
FACTOR(48)	-5.143	0.770	-0.884	0.091	-0.735
FACTOR(49)	.	.	.	.	.
FACTOR(50)	.	.	.	.	.
FACTOR(51)	.	.	.	.	.
FACTOR(52)	.	.	.	.	.

FIG. 120B

FACTOR(1)	0.374	0.030
FACTOR(2)	0.148	-0.102
FACTOR(3)	0.373	-0.046
FACTOR(4)	0.589	0.007
FACTOR(5)	0.523	0.335
FACTOR(6)	0.179	-0.117
FACTOR(7)	-0.509	0.137
FACTOR(8)	-0.042	0.105
FACTOR(9)	0.091	-0.114
FACTOR(10)	-0.030	0.261
FACTOR(11)	0.179	0.022
FACTOR(12)	-0.054	-0.268
FACTOR(13)	-0.182	0.101
FACTOR(14)	0.555	0.345
FACTOR(15)	0.237	-0.334
FACTOR(16)	-0.119	0.039
FACTOR(17)	-0.276	0.317
FACTOR(18)	0.012	-0.202
FACTOR(19)	-0.076	-0.087
FACTOR(20)	-0.539	-0.292
FACTOR(21)	-0.531	0.064
FACTOR(22)	0.043	-0.498
FACTOR(23)	0.043	-0.085
FACTOR(24)	-0.370	-0.429
FACTOR(25)	0.004	-0.397
FACTOR(26)	-0.610	-0.078
FACTOR(27)	-0.710	0.284
FACTOR(28)	0.293	0.226
FACTOR(29)	-0.498	0.031
FACTOR(30)	-0.362	0.038
FACTOR(31)	0.105	-0.183
FACTOR(32)	0.39	0.07

FIG. 120C

	7	1
FACTOR(33)	-0.655	-0.297
FACTOR(34)	-0.101	0.300
FACTOR(35)	-0.440	0.124
FACTOR(36)	0.091	-0.195
FACTOR(37)	0.314	0.594
FACTOR(38)	0.395	-0.398
FACTOR(39)	0.742	-0.151
FACTOR(40)	-0.032	0.410
FACTOR(41)	-0.317	-0.169
FACTOR(42)	-0.430	0.413
FACTOR(43)	0.040	-0.235
FACTOR(44)	-0.340	0.343
FACTOR(45)	.	.
FACTOR(46)	.	.
FACTOR(47)	.	.
FACTOR(48)	0.152	0.241
FACTOR(49)	.	.
FACTOR(50)	.	.
FACTOR(51)	.	.
FACTOR(52)	.	.

Canonical discriminant functions -- standardized by within variances

FIG. 120D

	1	2	3	4	5
FACTOR(1)	27.438	3.560	0.843	1.427	0.270
FACTOR(2)	-6.267	6.619	-1.701	2.550	-0.376
FACTOR(3)	-16.017	-10.274	2.733	1.002	-0.229
FACTOR(4)	12.113	-4.932	1.466	-1.255	0.058
FACTOR(5)	14.841	-2.377	-0.544	-0.513	0.154
FACTOR(6)	-2.351	-3.525	0.885	-1.473	0.044
FACTOR(7)	-7.108	-14.842	-2.433	-0.544	-0.051
FACTOR(8)	-9.948	6.632	-1.270	-0.400	-0.465
FACTOR(9)	6.671	4.888	-0.611	-0.128	0.757
FACTOR(10)	1.268	7.105	0.112	-0.551	0.506
FACTOR(11)	12.950	-2.135	-1.135	0.492	0.937
FACTOR(12)	13.992	-7.404	-2.089	-0.885	-0.234
FACTOR(13)	-0.462	7.670	1.774	-1.332	0.010
FACTOR(14)	4.507	-5.381	-1.613	0.358	0.519
FACTOR(15)	0.253	-4.373	1.244	0.297	-0.090
FACTOR(16)	1.100	1.219	-0.588	-0.401	0.330
FACTOR(17)	-19.311	2.780	-0.015	1.281	0.659
FACTOR(18)	-7.069	9.754	1.983	0.048	0.240
FACTOR(19)	3.083	-3.727	-0.262	-0.050	-0.797
FACTOR(20)	5.224	-14.281	0.440	-0.380	-0.412
FACTOR(21)	-4.385	8.410	1.632	-1.803	-0.376
FACTOR(22)	-11.841	1.424	-1.942	-0.313	0.021
FACTOR(23)	0.326	7.844	-1.281	-0.375	-0.033
FACTOR(24)	16.806	-1.427	1.553	0.226	1.227
FACTOR(25)	4.955	4.104	-0.182	0.870	0.165
FACTOR(26)	-13.789	1.446	-0.830	0.218	0.434
FACTOR(27)	5.664	-4.357	-1.257	0.867	1.086
FACTOR(28)	-7.455	3.259	0.074	-0.516	0.201
FACTOR(29)	7.290	0.406	1.117	0.207	0.107
FACTOR(30)	2.048	3.745	0.230	0.211	-1.142
FACTOR(31)	4.071	1.650	1.058	1.107	0.501

FIG. 121A

FACTOR(32)	-13.329	-0.589	-0.239	-0.843	2.114
FACTOR(33)	3.082	-0.136	0.593	0.075	1.371
FACTOR(34)	5.540	-1.505	0.312	0.195	0.751
FACTOR(35)	4.666	1.531	0.968	0.341	0.183
FACTOR(36)	-6.457	0.859	-0.125	0.693	0.757
FACTOR(37)	3.832	-3.623	1.159	0.154	0.270
FACTOR(38)	-5.971	0.459	-0.657	-0.390	0.704
FACTOR(39)	-9.213	-1.333	-0.489	-0.376	1.049
FACTOR(40)	-4.113	2.673	0.384	-0.821	0.636
FACTOR(41)	-1.483	-0.437	0.741	-0.318	1.051
FACTOR(42)	5.971	-1.754	0.867	0.652	0.113
FACTOR(43)	-2.855	-0.285	-0.355	-0.146	1.187
FACTOR(44)	-3.504	-2.416	0.078	0.379	1.236
FACTOR(45)	.	.	.	.	.
FACTOR(46)	.	.	.	.	.
FACTOR(47)	.	.	.	.	.
FACTOR(48)	-5.373	0.804	-0.924	0.095	-0.768
FACTOR(49)	.	.	.	.	.
FACTOR(50)	.	.	.	.	.
FACTOR(51)	.	.	.	.	.
FACTOR(52)	.	.	.	.	.

FIG. 121B

	6	7
FACTOR(1)	0.327	0.027
FACTOR(2)	0.126	-0.087
FACTOR(3)	0.234	-0.029
FACTOR(4)	0.574	0.007
FACTOR(5)	0.525	0.336
FACTOR(6)	0.185	-0.120
FACTOR(7)	-0.435	0.117
FACTOR(8)	-0.043	0.108
FACTOR(9)	0.095	-0.119
FACTOR(10)	-0.031	0.271
FACTOR(11)	0.183	0.023
FACTOR(12)	-0.053	-0.260
FACTOR(13)	-0.182	0.101
FACTOR(14)	0.552	0.342
FACTOR(15)	0.247	-0.346
FACTOR(16)	-0.127	0.042
FACTOR(17)	-0.266	0.306
FACTOR(18)	0.012	-0.202
FACTOR(19)	-0.081	-0.092
FACTOR(20)	-0.508	-0.275
FACTOR(21)	-0.494	0.059
FACTOR(22)	0.042	-0.496
FACTOR(23)	0.045	-0.089
FACTOR(24)	-0.346	-0.402
FACTOR(25)	0.004	-0.410
FACTOR(26)	-0.616	-0.079
FACTOR(27)	-0.678	0.271
FACTOR(28)	0.307	0.237
FACTOR(29)	-0.518	0.032
FACTOR(30)	-0.373	0.040
FACTOR(31)	0.109	-0.190

FIG. 121C

FACTOR(32)	0.348	0.062
FACTOR(33)	-0.642	-0.291
FACTOR(34)	-0.105	0.314
FACTOR(35)	-0.460	0.130
FACTOR(36)	0.095	-0.204
FACTOR(37)	0.314	0.595
FACTOR(38)	0.404	-0.406
FACTOR(39)	0.732	-0.149
FACTOR(40)	-0.033	0.422
FACTOR(41)	-0.329	-0.175
FACTOR(42)	-0.439	0.422
FACTOR(43)	0.041	-0.244
FACTOR(44)	-0.344	0.346
FACTOR(45)	.	.
FACTOR(46)	.	.
FACTOR(47)	.	.
FACTOR(48)	0.159	0.251
FACTOR(49)	.	.
FACTOR(50)	.	.
FACTOR(51)	.	.
FACTOR(52)	.	.

FIG. 121D

Canonical scores of group means

	1	2	3	4	5
F3*	43.081	-113.251	-4.364	-1.429	-2.323
F3*²	-104.714	-14.520	-9.260	-0.616	-2.977
FS	-86.840	-25.022	-13.495	-4.830	-3.285
FT	-10.393	-18.853	-6.650	-9.729	-0.283
R3*	-62.606	-7.312	-9.120	-7.595	-10.641
R3*²	-19.093	-18.816	-7.253	-7.728	-2.641
RS	-92.468	-11.944	-11.481	-5.703	-6.912
RT	-41.768	-25.145	-5.995	-0.841	-4.729

	6	7
F3*	1.03	-0.204
F3*S	-0.842	0.157
FS	3.792	-1.371
FT	-2.362	-0.091
R3*	-0.258	1.309
R3*S	-0.670	-3.601
RS	-3.109	1.244
RT	2.861	1.375

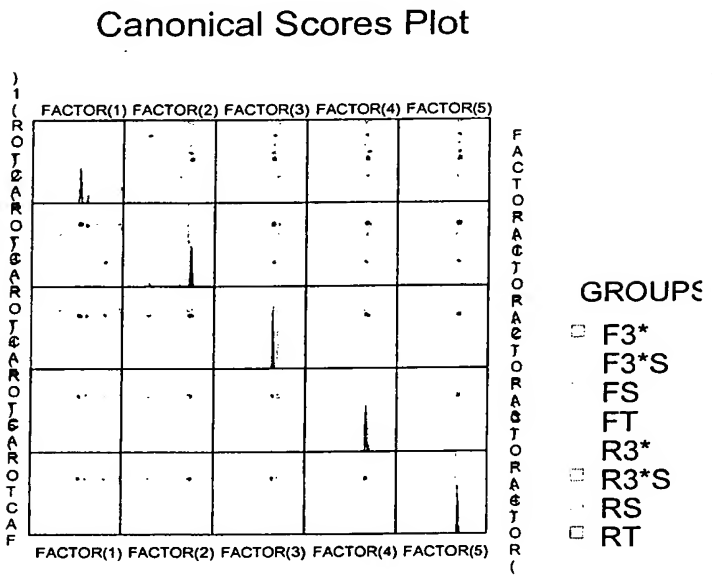


FIG. 122A

WARNING
The file
C:\Utilisateurs\OGp8586\Pr81OG290802F.SYD
was read for processing, and its contents have been replaced by saving the processed data into it.

53 cases and 56 variables processed and saved.

Distance metric is Euclidean distance

k-means splitting cases into 3 groups
Summary statistics for all cases

Variable	Between SS	df	Within SS	df	F-ratio
FACTOR(1)	4.310	2	47.690	50	2.259
FACTOR(2)	2.931	2	49.069	50	1.493
FACTOR(3)	1.260	2	50.740	50	0.621
FACTOR(4)	0.450	2	51.550	50	0.218
FACTOR(5)	0.433	2	51.567	50	0.210

FACTOR(6)	0.993	2	51.007	50	0.487
FACTOR(7)	1.371	2	50.629	50	0.677
FACTOR(8)	0.373	2	51.627	50	0.181
FACTOR(9)	1.368	2	50.632	50	0.675
FACTOR(10)	1.309	2	50.691	50	0.646
FACTOR(11)	5.184	2	46.816	50	2.768
FACTOR(12)	4.242	2	47.758	50	2.221
FACTOR(13)	3.361	2	48.639	50	1.727
FACTOR(14)	0.109	2	51.891	50	0.052
FACTOR(15)	0.219	2	51.781	50	0.106
FACTOR(16)	2.089	2	49.911	50	1.046
FACTOR(17)	4.144	2	47.856	50	2.165
FACTOR(18)	3.101	2	48.899	50	1.586
FACTOR(19)	1.107	2	50.893	50	0.544
FACTOR(20)	3.794	2	48.206	50	1.968
FACTOR(21)	2.569	2	49.431	50	1.299
FACTOR(22)	0.117	2	51.883	50	0.057
FACTOR(23)	2.352	2	49.648	50	1.184
FACTOR(24)	4.014	2	47.986	50	2.091
FACTOR(25)	0.662	2	51.338	50	0.322
FACTOR(26)	1.397	2	50.603	50	0.690
FACTOR(27)	0.297	2	51.703	50	0.144
FACTOR(28)	1.058	2	50.942	50	0.519
FACTOR(29)	1.008	2	50.992	50	0.494
FACTOR(30)	0.535	2	51.465	50	0.260
FACTOR(31)	1.603	2	50.397	50	0.795
FACTOR(32)	2.181	2	49.819	50	1.095
FACTOR(33)	0.690	2	51.310	50	0.336
FACTOR(34)	0.029	2	51.971	50	0.014
FACTOR(35)	4.310	2	47.690	50	2.260
FACTOR(36)	2.031	2	49.969	50	1.016
FACTOR(37)	0.522	2	51.478	50	0.253
FACTOR(38)	10.691	2	41.309	50	6.470
FACTOR(39)	1.890	2	50.110	50	0.943
FACTOR(40)	0.161	2	51.839	50	0.077
FACTOR(41)	1.642	2	50.358	50	0.815
FACTOR(42)	1.395	2	50.605	50	0.689
FACTOR(43)	4.625	2	47.375	50	2.441
FACTOR(44)	2.887	2	49.113	50	1.469
FACTOR(45)	0.385	2	51.615	50	0.187
FACTOR(46)	2.941	2	49.059	50	1.499
FACTOR(47)	1.830	2	50.170	50	0.912
FACTOR(48)	0.753	2	51.247	50	0.368
FACTOR(49)	0.026	2	51.974	50	0.012
FACTOR(50)	1.858	2	50.142	50	0.927
FACTOR(51)	1.300	2	50.700	50	0.641
FACTOR(52)	4.092	2	47.908	50	2.135
** TOTAL **	104.000	104	2600.000	2600	

Cluster 1 of 3 contains 18 cases

Members			Statistics				
Case	Distance		Variable	Minimum	Mean	Maximum	St.Dev.
Case 1	0.97		FACTOR(1)	-0.87	0.36	1.38	0.58
Case 5	0.97		FACTOR(2)	-0.59	0.29	1.34	0.60
Case 6	0.97		FACTOR(3)	-1.65	-0.19	0.69	0.50
Case 8	0.97		FACTOR(4)	-1.08	-0.05	1.66	0.74
Case 10	0.97		FACTOR(5)	-0.60	0.08	0.88	0.45
Case 11	0.97		FACTOR(6)	-1.30	-0.09	1.61	0.74
Case 13	0.97		FACTOR(7)	-1.71	-0.21	1.07	0.70
Case 14	0.97		FACTOR(8)	-1.03	0.07	1.06	0.62
Case 16	0.97		FACTOR(9)	-0.52	0.11	0.58	0.34
Case 17	0.97		FACTOR(10)	-2.74	-0.17	1.61	0.94
Case 18	0.97		FACTOR(11)	-0.68	0.24	1.02	0.46
Case 19	0.97		FACTOR(12)	-1.61	-0.01	1.21	0.68

FIG. 122B

Members		Statistics				
Case	Distance	Variable	Minimum	Mean	Maximum	St.Dev.
Case 20	0.97	FACTOR(13)	-1.30	0.01	0.88	0.55
Case 21	0.97	FACTOR(14)	-1.38	0.06	0.94	0.51
Case 28	0.97	FACTOR(15)	-0.82	0.06	1.20	0.57
Case 36	0.97	FACTOR(16)	-1.60	-0.12	0.65	0.62
Case 38	0.97	FACTOR(17)	-1.62	0.07	1.57	0.81
Case 53	0.97	FACTOR(18)	-1.10	0.22	2.55	0.94
		FACTOR(19)	-1.25	0.15	3.67	1.00
		FACTOR(20)	-1.48	-0.30	1.47	0.87
		FACTOR(21)	-1.51	-0.15	1.68	0.83
		FACTOR(22)	-2.73	-0.06	2.08	1.12
		FACTOR(23)	-1.86	-0.06	1.44	0.90
		FACTOR(24)	-1.48	0.20	2.00	1.09
		FACTOR(25)	-1.53	0.11	2.06	0.94
		FACTOR(26)	-1.20	0.18	2.67	0.98
		FACTOR(27)	-1.91	-0.08	1.35	1.02
		FACTOR(28)	-2.43	0.09	1.61	0.99
		FACTOR(29)	-1.28	0.04	1.79	0.87
		FACTOR(30)	-2.91	0.05	1.90	1.17
		FACTOR(31)	-1.86	0.20	2.39	1.15
		FACTOR(32)	-2.49	-0.24	1.56	1.25
		FACTOR(33)	-1.58	0.03	1.91	0.99
		FACTOR(34)	-1.55	-0.00	2.96	1.01
		FACTOR(35)	-2.25	-0.31	1.85	1.17
		FACTOR(36)	-2.91	0.07	1.90	1.14
		FACTOR(37)	-2.83	0.13	2.35	1.43
		FACTOR(38)	-2.61	-0.62	2.33	1.15
		FACTOR(39)	-2.80	-0.26	2.23	1.14
		FACTOR(40)	-2.61	0.01	2.51	1.25
		FACTOR(41)	-3.28	-0.24	2.90	1.44
		FACTOR(42)	-2.52	0.05	2.78	1.41
		FACTOR(43)	-2.88	0.31	2.13	1.14
		FACTOR(44)	-1.49	-0.04	1.99	0.96
		FACTOR(45)	-1.42	0.11	1.83	0.91
		FACTOR(46)	-1.62	-0.11	2.10	0.97
		FACTOR(47)	-2.13	0.26	2.79	1.24
		FACTOR(48)	-3.21	-0.15	1.91	1.42
		FACTOR(49)	-1.52	-0.02	2.29	1.03
		FACTOR(50)	-3.70	-0.23	1.37	1.41
		FACTOR(51)	-2.42	0.21	3.70	1.43
		FACTOR(52)	-1.87	0.35	5.52	1.49

Cluster 2 of 3 contains 18 cases

Members		Statistics				
Case	Distance	Variable	Minimum	Mean	Maximum	St.Dev.
Case 22	0.97	FACTOR(1)	-1.96	-0.04	1.50	0.99
Case 23	0.97	FACTOR(2)	-1.65	-0.28	1.84	0.91
Case 25	0.97	FACTOR(3)	-2.16	0.18	2.85	1.30
Case 26	0.97	FACTOR(4)	-3.55	0.13	2.26	1.31
Case 29	0.97	FACTOR(5)	-2.04	0.04	2.02	1.17
Case 30	0.97	FACTOR(6)	-1.84	0.19	3.40	1.41
Case 31	0.97	FACTOR(7)	-2.58	0.18	2.90	1.43
Case 33	0.97	FACTOR(8)	-1.79	0.05	3.56	1.31
Case 34	0.97	FACTOR(9)	-2.10	0.11	1.92	1.30
Case 35	0.97	FACTOR(10)	-2.21	0.20	1.62	1.01
Case 37	0.97	FACTOR(11)	-2.89	-0.44	2.63	1.28
Case 39	0.97	FACTOR(12)	-0.86	0.34	2.99	0.96
Case 41	0.97	FACTOR(13)	-1.25	0.30	1.52	0.81
Case 42	0.97	FACTOR(14)	-2.72	-0.05	3.12	1.29
Case 43	0.97	FACTOR(15)	-1.89	-0.09	2.38	1.28
Case 45	0.97	FACTOR(16)	-1.83	-0.15	1.79	1.02
Case 49	0.97	FACTOR(17)	-3.46	-0.36	1.37	1.26
Case 51	0.97	FACTOR(18)	-1.87	-0.33	2.39	1.19
		FACTOR(19)	-1.52	-0.19	1.56	0.83
		FACTOR(20)	-1.04	0.34	2.34	0.91

FIG. 122C

FACTOR(21)	-1.76	-0.15	1.64	0.88
FACTOR(22)	-2.88	0.05	1.52	1.06
FACTOR(23)	-1.30	0.28	1.77	0.87
FACTOR(24)	-1.56	0.18	1.13	0.74
FACTOR(25)	-2.32	-0.15	1.30	1.13
FACTOR(26)	-2.06	0.02	2.86	1.08
FACTOR(27)	-1.84	0.10	1.31	0.96
FACTOR(28)	-3.30	-0.20	2.60	1.25
FACTOR(29)	-2.04	0.14	1.94	1.03
FACTOR(30)	-3.05	0.09	1.97	1.13
FACTOR(31)	-2.39	-0.22	1.77	1.10
FACTOR(32)	-1.41	0.00	1.38	0.87
FACTOR(33)	-1.87	0.12	3.89	1.17
FACTOR(34)	-1.66	-0.03	2.05	0.98
FACTOR(35)	-1.30	-0.05	1.39	0.79
FACTOR(36)	-2.33	-0.26	0.85	0.85
FACTOR(37)	-1.47	-0.11	0.94	0.67
FACTOR(38)	-0.69	0.39	2.27	0.72
FACTOR(39)	-1.65	0.15	2.24	0.95
FACTOR(40)	-1.99	0.06	2.46	0.98
FACTOR(41)	-1.96	0.06	1.12	0.73
FACTOR(42)	-1.48	-0.22	1.04	0.71
FACTOR(43)	-2.27	0.07	1.99	0.86
FACTOR(44)	-1.75	-0.26	0.43	0.60
FACTOR(45)	-2.00	-0.02	1.13	0.75
FACTOR(46)	-0.59	0.32	2.18	0.77
FACTOR(47)	-2.07	-0.14	1.24	0.91
FACTOR(48)	-0.86	0.01	1.02	0.46
FACTOR(49)	-1.65	-0.01	1.88	0.74
FACTOR(50)	-1.15	0.01	2.45	0.76
FACTOR(51)	-1.95	-0.15	0.52	0.59
FACTOR(52)	-0.85	-0.04	1.08	0.39

Cluster 3 of 3 contains 17 cases

Members

Case	Distance
Case 2	0.97
Case 3	0.97
Case 4	0.97
Case 7	0.97
Case 9	0.97
Case 12	0.97
Case 15	0.97
Case 24	0.97
Case 27	0.97
Case 32	0.97
Case 40	0.97
Case 44	0.97
Case 46	0.97
Case 47	0.97
Case 48	0.97
Case 50	0.97
Case 52	0.97

Statistics

Variable	Minimum	Mean	Maximum	St.Dev.
FACTOR(1)	-2.67	-0.34	1.58	1.26
FACTOR(2)	-4.29	-0.01	1.70	1.34
FACTOR(3)	-3.06	0.01	1.49	1.05
FACTOR(4)	-1.44	-0.08	2.65	0.90
FACTOR(5)	-3.05	-0.13	2.34	1.25
FACTOR(6)	-1.95	-0.10	1.24	0.71
FACTOR(7)	-1.12	0.03	1.24	0.69
FACTOR(8)	-2.94	-0.12	1.55	1.00
FACTOR(9)	-2.80	-0.23	1.73	1.12
FACTOR(10)	-1.57	-0.03	1.85	1.07
FACTOR(11)	-1.92	0.20	2.23	0.98
FACTOR(12)	-3.64	-0.35	1.09	1.23
FACTOR(13)	-3.30	-0.32	2.52	1.42
FACTOR(14)	-2.33	-0.00	2.00	1.10
FACTOR(15)	-2.66	0.02	1.87	1.07
FACTOR(16)	-2.14	0.29	2.82	1.27
FACTOR(17)	-0.84	0.31	2.01	0.77
FACTOR(18)	-1.47	0.12	1.58	0.79
FACTOR(19)	-2.40	0.05	2.69	1.18
FACTOR(20)	-1.58	-0.04	2.30	1.15
FACTOR(21)	-1.10	0.32	3.10	1.24
FACTOR(22)	-1.15	0.01	1.63	0.85
FACTOR(23)	-3.20	-0.23	1.17	1.20
FACTOR(24)	-3.25	-0.40	0.87	1.08
FACTOR(25)	-1.25	0.04	2.36	0.95
FACTOR(26)	-2.19	-0.22	0.98	0.94
FACTOR(27)	-2.32	-0.02	1.60	1.08
FACTOR(28)	-0.81	0.11	1.39	0.70

FIG. 122D

FACTOR(29)	-2.02	-0.19	1.91	1.12
FACTOR(30)	-1.45	-0.14	0.90	0.64
FACTOR(31)	-1.32	0.01	1.44	0.68
FACTOR(32)	-1.07	0.26	2.55	0.81
FACTOR(33)	-2.34	-0.16	1.04	0.84
FACTOR(34)	-1.63	0.03	2.15	1.07
FACTOR(35)	-0.87	0.39	3.01	0.93
FACTOR(36)	-0.85	0.21	2.47	0.99
FACTOR(37)	-1.42	-0.02	1.98	0.75
FACTOR(38)	-0.94	0.25	2.60	0.80
FACTOR(39)	-2.19	0.12	1.53	0.88
FACTOR(40)	-1.06	-0.07	1.56	0.74
FACTOR(41)	-0.49	0.18	1.55	0.62
FACTOR(42)	-1.77	0.17	1.31	0.73
FACTOR(43)	-2.28	-0.40	1.13	0.88
FACTOR(44)	-2.33	0.31	2.96	1.31
FACTOR(45)	-2.74	-0.10	3.27	1.33
FACTOR(46)	-3.40	-0.23	1.73	1.20
FACTOR(47)	-1.86	-0.12	1.55	0.78
FACTOR(48)	-2.16	0.15	1.63	0.91
FACTOR(49)	-2.51	0.03	3.14	1.24
FACTOR(50)	-1.00	0.23	1.43	0.64
FACTOR(51)	-2.57	-0.06	1.05	0.79
FACTOR(52)	-1.99	-0.33	0.44	0.68

Cluster Parallel Coordinate Plots

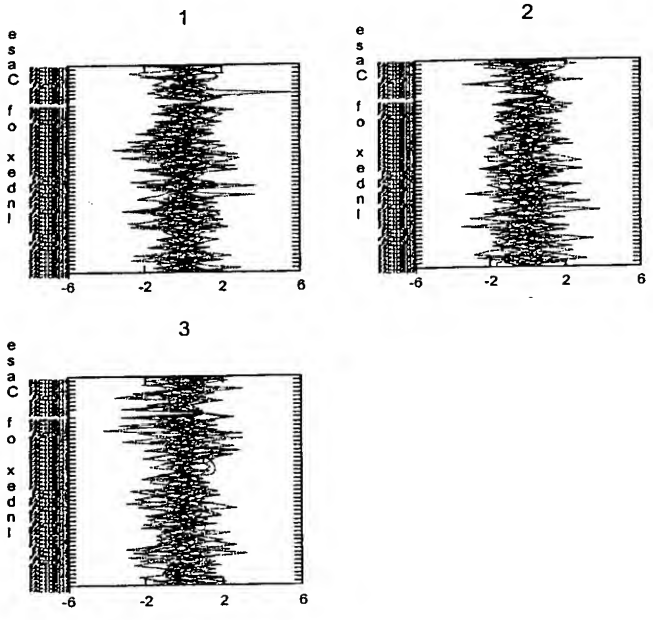


FIG. 123A

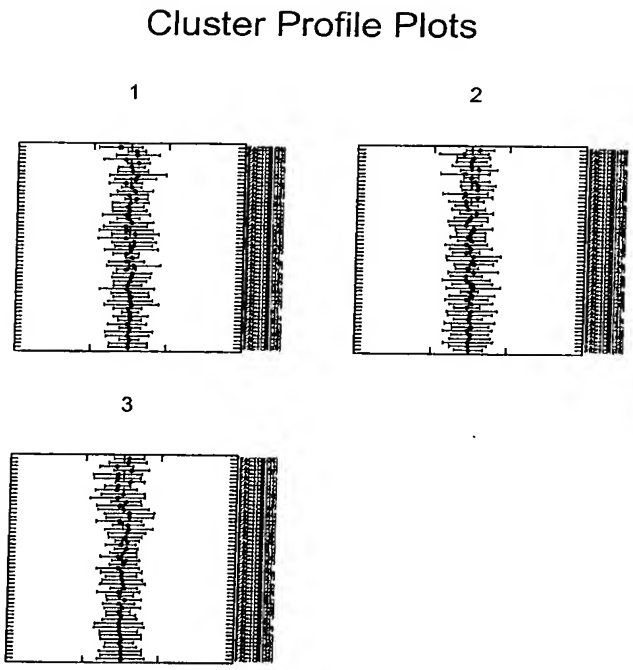


FIG. 123B